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The Precautionary Principle and the Protection of Indigenous Peoples' Rights in the Case of Activities on their Lands

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Abstract/lay summary

This thesis focuses on how the Precautionary Principle, a general principle of international law, can strengthen the protection of Indigenous peoples' rights, when States' actions may affect their lands and territories. This brings into focus the importance of Indigenous peoples' traditional knowledge, a system of knowledge tied to their lands, systematically developed by relying on observations, practices and experiences, which is able to predict outcomes. This knowledge represents an integral understanding of Indigenous peoples' traditional way of life, providing the 'best information available' about customs, values, activities, their special relationship with their environment and even the existence of particular risks and uncertainties, making it vital when it comes to the adoption of informed decisions and the full understanding of the possible consequences of a determined action on their livelihood.

This thesis shows that the precautionary principle has been influenced by a narrow understanding of one of its elements, 'scientific uncertainty', insufficient to effectively address potential threats that originate in human activities, like the extraction of natural resources, and seriously disturb the complex web of relationships and dynamics in determined ecosystem. This makes it necessary to embrace other sources of knowledge, in order to effectively avoid the materialisation of these potential impacts. It argues that traditional knowledge is recognised in international law as a source of scientific knowledge in a broad sense, and thus it should be integrated into the element of 'scientific uncertainty', providing a different understanding of risks, of 'what is known/unknown, what is uncertain and what is controversial. Moreover, as a scientific basis for the adoption of precautionary action, the integration of traditional knowledge expands the application of the precautionary principle to deal with potential threats of non-negligible harm to Indigenous peoples' traditional way of life.

From a procedural point of view, the integration of this traditional knowledge requires the existence of participatory mechanisms of public participation. In this case, the two participatory mechanisms that are at the front and centre of this discussion are the States' duty to consult Indigenous peoples, with the objective to

obtain their free, prior and informed consent, when they may be affected by certain measures; and the implementation of impact assessments. In this sense, I argue that both mechanisms are precautionary measures, being triggered when there are 'reasonable grounds for concern' about possibly non-negligible harm to Indigenous peoples' rights. This means that States must not only conduct consultations/impact assessments but are also under the duty to avoid the materialisation of potentially serious harm to Indigenous peoples, which implies the need to consider their traditional knowledge and accommodate their concerns, at the risk of failing to comply with the precautionary principle.

In addition, following a precautionary logic of 'the higher the risk the greater the need for precaution', States must reach an agreement or obtain Indigenous peoples' consent in situations where the potential impacts on their traditional way of life are of a more substantive nature. This shows that the precautionary principle strengthens the protection of Indigenous peoples' rights.

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Abbreviations

American Declaration on the Rights of Indigenous Peoples	ADRIP
African Commission on Human and Peoples' Rights	ACHPR
African Court on Human and Peoples' Rights	ACtHPR
Committee on the Elimination of Racial Discrimination	CERD
Committee on Economic, Social and Cultural Rights	CESCR
Convention on Biological Diversity	CBD
Human Rights Committee	HRC
Indigenous and Tribal Peoples Convention C169	C169
Inter-American Commission on Human Rights	IACHR
Inter-American Court on Human Rights	IACtHR
International Environmental Law	IEL
International Labour Organisation	ILO
International Tribunal for the Law of the Sea	ITLOS
Precautionary Principle	PP
United Nations	UN
United Nations Declaration on the Rights of Indigenous Peoples	UNDRIP
United Nations General Assembly	UNGA
United Nations Treaty System	UNTS
Traditional Knowledge	TK
World Intellectual Property Organisation	WIPO
World Trade Organisation	WTO

Chapter I: Context and Thesis Overview

1. Introduction

In 2001, acting on concerns about the use of natural resources and possible serious impacts on biodiversity from the Gonds peoples' activities in the Pench National Park, the Indian government introduced a management plan which included, as a precautionary measure, a ban on all local resource-use practices and restrictions of traditional passage in certain areas.[1] The plan was adopted without consulting these Indigenous communities or respecting their values and customs, despite their close relationship with the lands they have lived in for generations;[2] their dependence on these resources to survive and maintain their traditional livelihood;[3] and ignoring the fact that their traditional practices, developed over long periods of time and based on an integral knowledge and understanding of their environment, actually contributed to maintain biodiversity.[4] These restrictions severely disrupted the Gonds' livelihood and practices (being even subject to harassment and arrests for attempting to access their sacred sites),[5] and forced them to resort to illegal fishing and poaching, without following their traditional management rules, seriously affecting the ecosystem and ultimately rendering the precautionary ban ineffective.[6]

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[1] N. Kaur, N. Chowdhury and M. Khalid, "People, Parks and Precaution: The Evolution of the PP in Wildlife Conservation in India" in R. Cooney and B. Dickson (eds), *Biodiversity and the Precautionary Principle: Risk and Uncertainty in Conservation and Sustainable Use* (Earthscan, 2005), pp 218-220.
[2] P. Devellu, M. Raj, K. Bhanumathi, S. Kumar and A. Bandhopadhyay, "Indigenous and tribal communities, biodiversity conservation and the Global Environment Facility in India", A Report to Samata NGO (May 2005), pp 31-38.
[3] Ibid., pp 100- 101.
[4] A. Kulkarni and V. Vaidya, "Economics of Protected Area: A Case Study of Pench National Park" Environmental Economic Research Committee, Working Paper Series WB-4 (2002), pp 97-101.
[5] Devellu et al (n 2), pp 31 and 34-37.
[6] Kaur et al (n 1), pp 218-220.

As environmental threats and biodiversity loss increase due to the exploitation of natural resources and other human activities,[7] often especially affecting Indigenous peoples,[8] it is becoming more important to anticipate and avoid these impacts, even if there is no absolute proof of their existence. This brings into focus the role of the precautionary principle ('PP'),[9] applicable when there are threats of serious or irreversible harm in a context of lack of full scientific certainty.[10] However, as I mention below, the narrow understanding that has shaped the notion of 'science' and 'scientific uncertainty' since its emergence,[11] could provide an incomplete or inaccurate picture of risks and threats that not only affect the environment, but also peoples, as noted above. This is because the threats posed by these human activities can seriously disturb the dynamic and complex relations between the different elements of a particular environment, including humans,[12] making these non-environmental factors and the uncertainties surrounding them relevant in avoiding potential harm to the environment[13] but, more importantly, to peoples, especially those who closely interact with it, like Indigenous peoples.

The limitations of this narrow scientific approach are identified in the literature,[14] together with the acknowledgment of the need to embrace broader forms of scientific knowledge,[15] through public participation.[16] In this context, Indigenous peoples' traditional knowledge,[17] which combines environmental, social, cultural and

[7] J. Knox, "Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment", A/HRC/34/49 (19 January 2017), para. 37.
[8] Ibid., para. 22. See also V. Tauli-Corpuz, "Report of the Special Rapporteur on the rights of indigenous
Peoples", A/HRC/36/46 (1 November 2017), para. 6.
[9] According to Judge Cançado Trindade, this principle is 'more necessary than ever'. International Court of Justice, Pulp Mills on the River Uruguay (Argentina v. Uruguay) Judgment, ICJ Reports 2010, p. 14 ('Pulp Mills'), Separate Opinion of Judge Cançado Trindade, para. 89.
[10] See Chapter II, section 3.
[11] R. Cooney, "A long and winding road? Precaution from principle to practice in biodiversity conservation" in E. Fisher, J. Jones and R. von Schomberg (eds) *Implementing the Precautionary Principle: Perspectives and Prospects* (Elgar, 2006), p 230. See also Chapter II, section 3.2.
[12] A. Trouwborst, *Precautionary Rights and Duties of States* (Martinus Nijhoff, 2006), pp 82-83.
[13] Cooney (n 11), pp 229-230.
[14] See for instance E. Fisher and R. Harding, "The precautionary principle: Towards a deliberative, transdisciplinary problem-solving process" in R. Harding and E. Fisher (eds), *Perspectives on the Precautionary Principle* (Federation Press, 1999), p 295; and Trouwborst (n 12), pp 195-196.
[15] J. Peel, *Science and Risk Regulation in International Law* (CUP, 2010), p 336.
[16] L. Boisson de Chazournes, "New Technologies, the Precautionary Principle, and Public Participation" in T. Murphy (ed), *New Technologies and Human Rights* (OUP, 2009), p 179.
[17] For an explanation regarding the use of this term, see Chapter III, section 4.

spiritual elements, can play an important role, especially considering that extractive activities are increasingly taking place on their lands, affecting their special and sustainable relationship with their territories, as well as their cultural identity. Therefore, incorporating 'traditional knowledge' into the notion of 'scientific uncertainty' would expand the application of the PP, addressing situations of potentially non-negligible threats identified through this scientific knowledge, that could affect Indigenous peoples' traditional way of life.[18] Following this, the main research question is: how can the precautionary principle strengthen the protection of Indigenous peoples' rights when States' actions may affect their lands and territories?

This is something that, to my knowledge, it has never been explored, and in my view, it would result in an important contribution to the protection of Indigenous peoples' rights, by ensuring that their knowledge, interests and concerns are adopted in the decision-making process. Moreover, it would provide a consistent standard, by which States must adopt certain actions, such as accommodate Indigenous peoples' concerns or obtain their consent, if there are reasonable grounds for concern about potential threats of non-negligible harm to their traditional way of life. This would be independent from controversial aspects, like control over natural resources; a broad or narrow recognition of Indigenous peoples' self-determination, or the consideration of their consent as a veto power, among others, which have often resulted in a more limited compliance with States' obligations related to Indigenous peoples. This requires a brief explanation of some key elements, to which I turn now.

2. The Precautionary Principle

The PP occupies a central position in international law in dealing with uncertainties regarding non-negligible effects,[19] something especially relevant in international environmental law, where there is a constant degree of scientific uncertainty, due to

[18] See for instance, M. Kamminga, "The Precautionary Approach in International Human Rights Law: How It can Benefit the Environment" in D. Freestone and E. Hey (eds), *The Precautionary Principle and International Law: The Challenge of Implementation* (Kluwer, 1996), p 185, arguing that Indigenous peoples' cultural rights qualify for precautionary treatment. See also Chapters II, section 4.3.1 and III, sections 4-5.

[19] J. Cameron, "The precautionary principle: Core meaning, constitutional framework and procedures for implementation" in Harding and Fisher (n 14), p 36.

the often insufficiently understood dynamics between the different elements of the environment.[20] This makes planning more difficult, because of the increased possibilities of making mistakes[21] and the fact that uncertainties could mask 'invisible' risks, leading to delays in adopting measures until it could be too late.[22] In this context, the PP requires States to adopt effective and proportionate actions to avoid potentially serious environmental impacts even if there is no conclusive cause-effect relationship established,[23] so if mistakes are made, the erring "is done on the side of caution and not to the detriment of the environment."[24]

The PP is not triggered in every situation of possible risks and scientific uncertainty; there has to be, based on the 'best information available',[25] some degree of evidence or knowledge, a 'reasonable ground for concern',[26] excluding 'intuitions' or 'mere beliefs', to prevent overregulation.[27] In this sense, Cançado Trindade has equated precaution with 'common sense', "seemingly the least common of all senses".[28] Interestingly, it took some time for this 'common sense' principle to be adopted in international law, first appearing during the 80s in the Second International Conference on the Protection of the North Sea.[29] It has been subsequently incorporated in several international conventions and instruments, most notably, Principle 15 of the Rio Declaration,[30] consolidating the PP as a legal norm

[20] D. Bodansky, J. Brunée and E. Hey, "International Environmental Law: Mapping the field", in D. Bodansky, J. Brunée & E. Hey (eds), *The Oxford Handbook of International Environmental Law* (OUP, 2014), p 7.
[21] Trouwborst (n 12), p 71.
[22] J. Peel, "Changing Conceptions of Environmental Risk" in J. Viñuales (ed), *The Rio Declaration on Environment and Development*: *A Commentary* (OUP, 2015), pp 75 and 79.
[23] N. De Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules* (OUP, 2002), p 91.
[24] Trouwborst (n 12), p 5.
[25] R. Harding and E. Fisher, "Introducing the precautionary principle" in Harding and Fisher (n 14), p 20; Trouwborst (n 12), pp 144-145.
[26] Trouwborst (n 12), p 224; C. Foster, *Science and the Precautionary Principle in International Courts and Tribunals: Expert Evidence, Burden of Proof and Finality* (CUP 2011), p 255; De Sadeleer (n 23), p 161.
[27] Foster (n 26), p 257; De Sadeleer (n 23), p 159.
[28] Pulp Mills, Separate Opinion of Judge Cançado Trindade (n 9), para. 96.
[29] Paras. VII, XV and XVI of the "Second International Conference on the Protection of the North Sea," London, 24-25 November 1987.
[30] 1992 Rio Declaration on Environment and Development ('Rio Declaration'), UN Doc. A/CONF.151/26 (vol. I)/31ILM 874(1992).

of international environmental law,[31] which has acquired the legal status of general principle of international law.[32]

The threats and uncertainties that the PP faced at the time of its appearance were of a more technical nature, i.e., the introduction of potentially hazardous new substances/processes, without complete knowledge of their effects and interactions.[33] This means that the notion of 'scientific uncertainty' has been more oriented towards an experimental perspective, based on 'conventional sciences' like chemistry, biology and physics.[34] However, most of the current environmental threats come not from poorly understood chemical or technologies, but from human activities like the exploitation of natural resources which, as noted above, deeply disturb the complex relations between the different natural elements, including human interactions with flora and fauna.[35] This indicates that a narrow understanding of 'scientific uncertainty' could leave important aspects unprotected, as it overlooks risks and uncertainties which "clearly go well beyond the biological and ecological sciences and into the murky realms of the dynamics of human social, economic and political systems".[36] In this context, it is interesting to note that some formulations of the PP mention socio-economic considerations, that need to be taken into account in applying this principle.[37] However, what appears to be absent are 'cultural' considerations, which are vital in the case of Indigenous peoples' traditional way of life, increasingly threatened by extractive activities in their lands,[38] creating risks to their knowledge, spiritual customs, and practices, as illustrated in the case of the Gonds.

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[31] Peel (n 22), p 75.
[32] Pulp Mills, para. 164; Chapter II, section 2.3.
[33] R. Cooney, "The Precautionary Principle in Biodiversity Conservation and Natural Resource Management: An issues paper for policy-makers, researchers and practitioners" IUCN Policy and Global Change Series No. 2(2004), p ix.
[34] A. Orford, 'Scientific Reason and the Discipline of International Law', EJIL Vol. 25 no. 2(2014), p 370. See also Chapter II, section 3.2.
[35] See also Chapter II, sections 3.2 and 4.3.
[36] Cooney (n 11), p 230. See H. Moller, F. Berkes, P. O. Lyver, and M. Kislalioglu, 'Combining science and traditional ecological knowledge: monitoring populations for co-management', Ecology and Society 9(3):2 (2004), p 11.
[37] See for example, UN Framework Convention on Climate Change, 1771UNTS 107; UN Doc. A/AC.237/18(Part II)/Add.1; 31ILM849(1992), Article 3.3.
[38] V. Tauli-Corpuz, "Report of the Special Rapporteur on the rights of indigenous Peoples", A/72/186 (21 July 2017), para. 53.

Following this, and as recognised in the literature, it is necessary to adopt a broader approach to 'scientific uncertainty', incorporating other forms of knowledge beyond 'conventional sciences'.[39] This would result in an expanded PP, able to address these types of risks and uncertainties that are 'beyond biological and ecological sciences'. One of these forms of knowledge that is relevant here is Indigenous peoples' traditional knowledge.

3. Indigenous peoples' traditional knowledge

There is no agreed definition of 'Indigenous peoples' in international law, although there seems to be a consensus about their characteristics, i.e., a special relationship with their lands; historical continuity with pre-invasion and pre-colonial societies; distinctive cultural characteristics; and self-identification as Indigenous.[40] These characteristics are manifested in their traditional way of life, based on centuries-long ties with their lands and territories[41] in a way that intertwines spiritual, social and environmental elements,[42] reflecting a holistic worldview where everything is connected. This relationship has enabled the development of a body of traditional knowledge that underpins their way of life[43] and has resulted in the careful conservation of biodiversity and natural resources,[44] from which their physical (food, shelter, medicine) and cultural (sacred sites, ceremonies)[45] survival depends. For example, Indigenous peoples in Riung, Indonesia, based on their knowledge and understanding of seasonal changes and cycles, have established a cultural prohibition

[39] Peel (n 15), p 336; Trouwborst (n 12), pp 195-196; and De Sadeleer (n 23), p 184, among others.
[40] See for instance, UN Sub-Commission on Prevention of Discrimination and Protection of Minorities, "Study of the Problem of Discrimination against Indigenous Populations (José Martinez Cobo, Special Rapporteur)" UN Doc. E/CN.4/Sub.2/1986/7/Add-4(1986) paras. 379-381; see also J. Anaya, *Indigenous Peoples in International Law* (2nd ed. 2004), Part I.
[41] See for instance, D. Smyth, "Indigenous land and sea management–a case study" (Canberra: DSEWPaC, 2011), p 11: "Australia's Indigenous people and cultures have adapted to major climatic, sea level and environmental changes over the last 50,000 years."
[42] See for instance, UN General Assembly, United Nations Declaration on the Rights of Indigenous Peoples: resolution adopted by the General Assembly, 2 October 2007, A/RES/61/295 ('UNDRIP'), preamble; Tauli-Corpuz (n 8), para. 9; and Anaya (n 40), among others.
[43] J. Seymour and H. Girardet, *Far from Paradise: The Story of Human Impact on the Environment* (3rd edition, Merlin Press, 1990).
[44] A. Gray "Indigenous Peoples, Their Environments and Territories" in D. Posey, "Introduction: Culture and Nature-The Inextricable Link" in D. Posey (ed), *Cultural and Spiritual Values of Biodiversity* (UNEP, 1999), p 62; see also Chapter III, sections 3-5.
[45] Knox (n 7), paras. 22-23.

over the exploitation of fish and shellfish in certain important ancestral sites, only lifted during October and November, allowing for the regeneration of these resources.[46]

Indigenous peoples' livelihood has inspired an inaccurate narrative of them as being 'ecologically noble savages',[47] despite the fact that they are not a monolithic group, with practices regarding the use of natural resources varying around the world,[48] and that terms like 'conservation' are often at odds with Indigenous cosmologies, implying a separation between nature and humans.[49] It would be more accurate to say that their sensible management of their lands and resources is not based on Western constructions of conservation[50] but on particular and holistic conceptions of their environment, in which each element has its own place and unnecessary destruction can affect the material and immaterial world,[51] as well as on their direct dependence on these resources to survive as peoples.[52]

There is no internationally agreed conceptualization of 'traditional knowledge' to date, although the World Intellectual Property Organization ('WIPO') is currently working on such definition.[53] Generally speaking, traditional knowledge is understood as a broad notion, referring to knowledge, practices and innovations of Indigenous and local communities.[54] The WIPO recognises that this knowledge is the result of an 'intellectual activity',[55] that I argue in Chapter III is of a scientific nature, as it is developed to understand the universe, in a systematic way, based on observations and experiences and being able to predict outcomes. As such, it

[46] WWF report "Working with Indigenous and Local Knowledge Systems for the Conservation and Sustainable Use of Biodiversity and Ecosystem Services: An Analysis of Selected Case Studies from WWF Projects Worldwide as a Contribution to IPBES-2" (2013), p 29.
[47] See for instance K. Redford, "The Ecologically Noble Savage", Cultural Survival Quarterly 15, No. 1(1991) recounting how this myth arose; see also Chapter III, section 3.
[48] E. Desmet, *Indigenous Rights Entwined with Nature Conservation* (Intersentia, 2011), p 50.
[49] Gray (n 44), p 62.
[50] J. Colding and C. Folke, "Social Taboos: 'Invisible' Systems of Local Resource Management and Biological Conservation" Ecological Applications 11(2), 2001, p 595; Desmet (n 48), p 50.
[51] D. Posey, "Introduction: Culture and Nature-The Inextricable Link" in Posey (n 44), p 4.
[52] D. Shelton "Principle 22: Indigenous People and Sustainable Development" in Viñuales (n 24), p 542.
[53] WIPO, "The Protection of Traditional Knowledge: Draft Articles" WIPO/GRTKF/IC/40/18(June 2019), Annex, p 5. As noted in Chapter III, section 4, some of the difficulties are because the term 'traditional' is difficult to define.
[54] Convention on Biological Diversity ('CBD'), UNTS vol.1760, p. 79, Article 8(j). See also WIPO Draft Articles (n 53), Annex, p 5.
[55] WIPO, "Glossary of Key Terms related to Intellectual Property and Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions" WIPO/GRTKF/IC/40/INF/7(April 2019), Annex, p 44; Chapter III, section 4.

conforms to the notion of 'science', and it can be integrated into the notion of 'scientific uncertainty'.

Another important aspect of this scientific knowledge is that, being developed by Indigenous peoples' themselves, it reflects an integral understanding of their traditional livelihood and their special relationship with their lands. This includes the existence of uncertainties, as Indigenous cosmologies portray a universe in constant motion where changes that often cannot be accurately forecasted occur, so they must remain vigilant and adaptive.[56] Following this, traditional knowledge represents the 'best information available' about scientific uncertainties, threats to Indigenous peoples' particular way of life, and how to address them. This is especially important when it comes to their cultural and spiritual aspects, difficult to identify and much less understood by foreigners, which could result in substantive harm to their cultural identity, by for instance, destroying a sacred tree.

Therefore, when it comes to activities on their lands that could affect Indigenous peoples' livelihood, we would be in the presence of 'scientific uncertainty' (identified by this traditional knowledge), and a 'threat of serious/irreversible harm', expanding the application of the PP to address these potential threats. In this context, traditional knowledge would have a crucial role in the adoption of effective precautionary action to protect their rights. Following this, it is necessary to look at the incorporation of this knowledge in decision-making, to which I turn now.

4. Traditional knowledge and decision-making

As suggested above, public participation plays an important role in expanding the notion of 'science', integrating other types of knowledge;[57] for instance, Peel notes that this integration depends on the existence of appropriate mechanisms that facilitate public participation.[58] In the case of Indigenous peoples, this refers to the right to be consulted, with the objective to obtain their free, prior and informed consent ('FPIC'), conducted together with impact assessments to assess possible

[56] R. Barsh, "Indigenous knowledge and biodiversity", in Gray (n 44), p 74.
[57] Boisson de Chazournes (n 16), pp 179-180. See also De Sadeleer (n 23), pp 184-185.
[58] Peel (n 15), p 336.

environmental, social, and cultural impacts (with their participation), as noted by instruments like the Indigenous and Tribal Peoples Convention C169;[59] the UN Permanent Forum on Indigenous Issues;[60] the Special Rapporteur on the Rights of Indigenous Peoples;[61] the Inter-American Court of Human Rights ('IACtHR')[62] and the African Commission on Human and Peoples' Rights ('ACHPR'),[63] among others. This allows the development of a 'genuine dialogue'[64] by which Indigenous peoples can fully express their viewpoints[65] and exercise some influence over decision-making, especially when it comes to projects and developments on their lands, reversing a "historical pattern of exclusion from decision-making, in order to avoid the future imposition of important decisions on indigenous peoples".[66]

However, as I will analyse extensively in Chapters IV and V, there are some controversies that affect the proper implementation of these participatory rights, reducing their effectiveness, mainly related to Indigenous peoples' right to self-determination and their control over their lands and territories; the 'veto' character of FPIC; and the situations where consent is required.[67] This weakens the protection of Indigenous peoples' rights, and strongly suggest that the emphasis is on issues of participation and control. In this context, it is important to consider that consultations and impact assessments are applicable in situations that 'may' affect Indigenous peoples,[68] and that they enable them to 'fully understand' and be "aware of possible risks" of projects and developments on their lands.[69] This, added to the role of

[59] International Labour Organisation, Indigenous and Tribal Peoples Convention, C169, 27 June 1989, C169, entered into force 5 September 1991('C169'), Articles 6, 7.3 and 15, among others.
[60] UN Economic and Social Council, Permanent Form on Indigenous Peoples, "Report on Free, Prior and Informed Consent", UN Doc.E/C.19/2005/3 (17 February 2005), p 12.
[61] V. Tauli-Corpuz, "Report of the Special Rapporteur on the rights of indigenous peoples", A/HRC/45/34, (18 June 2020)('2020 Report'), para. 58.
[62] IACtHR, "Case of the Saramaka People v Suriname, Judgment of November 28, 2007 (Preliminary Objections, Merits, Reparations, and Costs)"('Saramaka'), paras. 129-134.
[63] ACHR, "Case 276/03: Centre for Minority Rights Development (Kenya) and Minority Rights Group (on behalf of Endorois Welfare Council)/Kenya", paras. 227-228.
[64] Anaya (n 40), p 154.
[65] ILO, "Understanding the Indigenous and Tribal Peoples Convention, 1989 (No 169): Handbook for ILO Tripartite Constituents", p 15.
[66] J. Anaya, "Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous Peoples" 15 July 2009, A/HRC/12/34 (15 July 2009)('2009 Report'), para. 41; 2020 Report, para. 50.
[67] See 2009 Report, para. 48; Chapters IV, section 6.1-6.3 and V, section 2.2.3; M. Barelli, "Free, Prior and Informed Consent in the UNDRIP" in J. Hohmann and M. Weller (eds) *The UN Declaration on the Rights of Indigenous Peoples: A Commentary* (OUP, 2018).
[68] C169 Article 6; UNDRIP, Article 19.
[69] 2020 Report, para 56-58; Saramaka, paras 129 and 133.

traditional knowledge in a 'wider' PP mentioned above, set the stage for my research question, which is how this wider PP can strengthen the protection of Indigenous peoples' rights when States' actions may have negative impacts on their lands.

This is important because, as outlined above, some of the criticisms directed to this process involve the issue of FPIC, generally an objective of consultations and not a requirement (only needed to be obtained in some exceptional circumstances).[70] This would leave the final decision about projects in Indigenous lands to States, even if there are potentially serious impacts on their way of life, without the requirement to consider their knowledge and the existence of potentially non-negligible risks to their lives. As noted by Venne, this allows States to have "an alibi to say that they did ask us, but there is no requirement to implement our position".[71] However, if there is a duty for States to avoid the materialisation of serious/irreversible harm to Indigenous peoples' livelihood, their traditional knowledge (i.e., the 'best information available' about possible risks, especially those of a cultural/spiritual nature), concerns and interests must be accommodated. Moreover, considering that precautionary actions must be 'effective and proportionate', when potential threats are of a substantive nature, an enhanced safeguard, FPIC, would be required, following a logic of 'the higher the risk the greater the need for precaution',[72] ensuring that their knowledge and interests are actually considered and that only the risks that they deem acceptable will occur, strengthening the protection of Indigenous peoples' rights.

5. Thesis overview

To answer my research question, I will do a doctrinal legal analysis of international law, that is, the analysis of international treaties, international declarations, action plans, voluntary guidelines, *travaux préparatoires*, jurisprudence of international courts and monitoring bodies, national legislation, international reports, doctrine and general principles of international law, from both international environmental and human rights fields. In addition, being this a work that focuses on Indigenous

[70] See for instance Chapters IV, section 6.3 and V, section 2.2.3.
[71] S. Venne, "The New Language of Assimilation" in Without Prejudice Vol. II No 2(1989), p 58.
[72] Kamminga (n 18), p 185.

peoples' traditional knowledge and participation, Indigenous perspectives must be taken into account; in this context, especially in Chapter III, several references to traditional knowledge and its uses, and Indigenous peoples' cosmovision and livelihood are obtained from Indigenous writers, people that have translated their work or have been in direct contact with them in an academic context, including anthropologists, historians, sociologists, and even conventional scientists like geologists, climate scientist and biologists. Some of the Indigenous experiences are also taken from international jurisprudence, especially from testimonies in cases before the IACtHR. The inclusion of Indigenous perspectives do not constitute an attempt to simplify their complex and holistic understanding of their worldviews; as I mention in Chapter III, traditional knowledge cannot be 'delocalised' or 'cherry-picked', at the risk of distorting its meaning and diminishing its vital importance for Indigenous peoples, who do not so much 'learn' the secrets of their lands and territories but experience them in a living process. I would also like to state that I mean no disrespect to any peoples by referencing them.

The main body of the thesis is divided in five chapters. The analysis of the PP takes place in Chapter II, including its origins and development in international environmental law; its legal status as a general principle of international law; its elements; and its effects, including the alleged reversal of the burden of proof, providing some clarity about issues that are relevant for this research. In this context, I do not attempt to define the PP, relying instead (like several authors) on the existence of certain elements present in the different formulations of the PP in international law. These are: a threat of harm; of a serious/irreversible nature; and scientific uncertainty, being this last element shaped by a narrow understanding of 'science', inadequate to address potential threats that involve socio-economic uncertainties, affecting the adoption of precautionary action. The analysis of non-environmental considerations, especially cultural aspects and uncertainties, and the expansion of the 'scientific uncertainty' notion to incorporate other types of knowledge, such as traditional knowledge, forms an important part of this chapter.

The scientific nature of traditional knowledge and its role in precaution is the focus of the first part of Chapter III. In this context, I highlight two important things:

first, that traditional knowledge reflects Indigenous peoples' integral worldview, integrating social, cultural, spiritual and environmental aspects, and it is applicable in situations of uncertainty, an element embedded in Indigenous cosmovision. Second, that this notion is the product of an intellectual process, based on observations and experiences and tested in a systematic way, being able to predict outcomes, conforming to the general idea of 'science'. This has been recognised in international law in several instances, including instruments with broad support like the Rio Declaration, Agenda 21 and the UNDRIP; States with important Indigenous populations; and academics. As such, it can be incorporated into the notion of 'scientific uncertainty', providing the best information available regarding reasonable grounds for concern about potentially serious or irreversible environmental threats on their way of life. Considering this, I then turn to the question of the role of traditional knowledge in situations of threats of non-negligible harm to Indigenous peoples' traditional livelihood, especially looking at the way in which it can help to fill information gaps and determine the existence of potential threats of serious/substantive harm, and how to address them.

The second part of this chapter is dedicated to the analysis of the biodiversity regime, explicitly guided by a precautionary approach,[73] being an example of a regime that relies on traditional knowledge as a basis for the adoption of precautionary action, both in the conservation of biodiversity[74] but also when it comes to the avoidance of harm in regard to Indigenous peoples' cultural aspects. In this context, I especially focus on the work of the Ad-hoc Open-ended Working Group on Article 8(j) and Related Provisions, resulting in several soft-law instruments that complement the CBD, which establish Indigenous participatory mechanisms (impact assessments and consultations) and the incorporation of their traditional knowledge in decision-making. They also acknowledge the need to obtain consent in certain situations where essential aspects of Indigenous peoples' lives could be affected, like sacred sites. This regime provides a model where traditional knowledge and Indigenous peoples' participation in decision-making play a vital role

[73] See for instance, CBD Preamble.
[74] Ibid., Article 8(j).

in the avoidance of potential threats of non-negligible harm to both biodiversity and Indigenous peoples' traditional way of life,[75] protecting their rights.

Chapter IV focuses on the protection of Indigenous peoples' rights under the C169 (the only binding treaty regarding Indigenous peoples in international law) and the UN Treaty System, specifically three Conventions in which Indigenous peoples have relied the most to protect their rights: the International Covenant on Civil and Political Rights ('ICCPR'),[76] the International Covenant on Economic, Social and Cultural Rights ('ICESCR'),[77] and the International Convention on the Elimination of All Forms of Racial Discrimination ('ICERD').[78] The UNTS conventions do not mention the term 'Indigenous peoples', but their monitoring bodies have reinterpreted them to accommodate Indigenous claims, under the notion of 'cultural rights' (ICCPR and ICESCR)[79] and under its broader work against discrimination, in the case of ICERD. The protection of these rights requires the 'effective participation' of Indigenous peoples in decision-making, allowing for the incorporation of their traditional knowledge. The monitoring bodies' practice shows that this participation is understood as 'consultations', although without establishing concrete requirements, with has led to some authors alleging 'proforma' consultations in the complaint procedure. However, a more recent case before the Human Rights Committee, where the effects on the authors were substantive, may open the door to the inclusion of impact assessments into this notion of 'effective participation', and the possible recognition of FPIC as a requirement in certain situations. That being said, much remains to be clarified, especially the conditions in which FPIC is applied, and what would constitute 'substantive harm'. The more general reporting procedure does not contribute much in terms of clarifying these issues, as there is a lack of a consistent and clear practice, in particular regarding 'obtaining' and 'seeking' FPIC and when States should conduct impact assessments.

[75] See Chapter III section 6.1.
[76] UNGA, "International Covenant on Civil and Political Rights", 16 December 1966, UNTS, vol. 999, p. 171.
[77] UNGA, "International Covenant on Economic, Social and Cultural Rights", 16 December 1966, UNTS, vol. 993, p. 3.
[78] UNGA, "International Convention on the Elimination of All Forms of Racial Discrimination", 21 December 1965, UNTS, vol. 660, p. 195.
[79] ICCPR Article 27, ICESCR Article 15.1 (a).

For its part, C169 explicitly recognise the duty to consult Indigenous peoples before a measure may affect them, following a series of requirements that aim to ensure a genuine dialogue in good faith,[80] and to conduct impact studies to assess cultural, economic, social and environmental harm with Indigenous cooperation.[81] Yet, due to concerns about self-determination, it also adopts a view of FPIC as a 'veto power' that Indigenous peoples should not enjoy, restricting its application only to situations of relocations, and even then allowing States to circumvent the lack of consent,[82] and remaining silent regarding other cases of potentially substantive harm. This indicates that while traditional knowledge is included in decision-making, there is no guarantee that it would actually be considered, as both the UNTS and C169 do not endorse a strong version of FPIC, leaving the final decision in the hands of States (even in situations of potentially serious/substantive threats), offering insufficient protection to Indigenous peoples' traditional way of life.

In Chapter V, I analyse UNDRIP and the protection of Indigenous peoples' rights under the American Convention on Human Rights[83] and the African Charter on Human and Peoples' Rights,[84] where there have been important developments. I begin by looking into the legal status of the Declaration, before moving to the protection of Indigenous peoples' rights, where a similar approach as C169 is followed, as the latter influenced the former. However, there are some differences, such as the absence of explicit references to impact assessments (although I argue they are implicitly included) and the establishment of at least two scenarios where consent is required, relocation and the storage of hazardous materials in Indigenous territories. In this context, a majority of authors consider that another situation where FPIC would be required is when there may be substantive impacts on their traditional livelihood, including to their cultural and spiritual aspects, following an expansive interpretation of this Declaration; this would provide a higher degree of protection, aligning with a precautionary approach. Yet, this is countered by some Indigenous authors (and even some regional jurisprudence and States' practice) who consider

[80] C169, Article 6; 2009 Report, paras. 46-49.
[81] C169, Articles 7.3 and 15.
[82] Ibid., Article 16.
[83] Organization of American States, American Convention on Human Rights, 22 November 1969, 1144UNTS123, entry into force 18 July 1978.
[84] Organization of African Unity, African Charter on Human and Peoples' Rights (Banjul Charter), OAU Doc.CAB/LEG/67/3 rev.5, 21I.L.M.58(1982), entry into force October 21, 1986.

that UNDRIP reflects a colonialist approach which reinforces the power of States over Indigenous peoples, including having the final word in decision-making.

I then move on to the protection of Indigenous peoples through the application and interpretation of the regional instruments mentioned above. This is achieved in the Inter-American system by, based on Indigenous peoples' right to property over their territories, relying on consultations, environmental and social impact assessments and the need to obtain consent in the case of 'large-scale developments' on their lands, due to the substantive impacts that they may cause. That being said, the subsequent practice of the IACtHR has failed to uphold this standard, especially regarding spiritual/cultural impacts, generating some uncertainty about this heightened safeguard. The African System for its part presents an interesting contrast between the ACHPR, which follows the IACtHR safeguards, and the more recent jurisprudence of the African Court on Human and Peoples' Rights, which in a more recent case omitted any references to FPIC and failed to provide a clear standard for the protection of Indigenous peoples' rights. Despite this, in general, there is a higher degree of protection in both UNDRIP and the regional systems compared to C169 and the UNTS, with FPIC figuring more prominently; however, some issues regarding self-determination and the inconsistent application of safeguards may undermine this protection.

In Chapter VI, recalling the precautionary role of traditional knowledge, and based on the situations in which consultations/impact assessment are applied, I analyse how the PP influences this decision-making process, strengthening the protection of Indigenous peoples' rights, by requiring the accommodation of their concerns and knowledge (the 'best information available' regarding potential threats) in the decision, at the risk of causing serious harm. Furthermore, I argue that when there are threats of potentially substantive harm, Indigenous peoples' FPIC needs to be obtained, as a heightened precautionary safeguard, independent of issues regarding self-determination or control over natural resources. This would ensure that they have actual influence over the decision and that only the risks that they consider acceptable could occur, which is especially important when it comes to spiritual/cultural effects, more difficult to identify and address without their input. As Indigenous peoples' right are not absolute, I then address possible conflicts between

the duty to obtain FPIC and the need to act to avoid potentially serious harm to other values, important for the society at large. To do this, I consider three scenarios: when a rapid response is needed; the establishment of conservation areas; and climate change mitigation, arguing that, generally, any measure that requires relocation would fail to comply with the PP, but other measures must be assessed on a case-by-case basis.

I finish this work in Chapter VII with some conclusions and mentioning possible directions for further research.

Chapter II: The Precautionary Principle

1. Introduction

The precautionary principle ('PP') is broadly applied in international environmental law ('IEL'), although this recognition has not translated into a universally accepted definition.[1] This is a difficult task due to its several formulations in different fields,[2]

[1] G. Marchant, "From General Policy to Legal Rule: Aspirations and Limitations of the Precautionary Principle", Environmental Health Perspectives vol. 11 n. 14 (2003), p 1799. See also, S. Mead, "The

like biodiversity,[3] marine pollution[4] and climate change,[5] among others. Generally speaking, the PP provides guidance when there is scientific uncertainty about adverse impacts of a determined measure on the environment, establishing a new paradigm: even if there is no clear cause-effect link established between a potential damage and its source, action to avoid the materialization of this harm must be taken;[6] however, it remains a controversial notion.[7] As a key part of this research, it is important to address some of the debates surrounding this principle, such as if it is a principle or an approach; its legal status and core elements; and its effects.

What distinguishes the PP from 'prevention',[8] where the cause-effect relationship is known, is the existence of 'scientific uncertainty'.[9] Yet, not every case where there is some uncertainty triggers the PP; something more than 'mere beliefs' or simple intuitions are needed, otherwise the PP could cause overregulation or lead to a societal standstill.[10] Generally, this element has been influenced by a narrow understanding of 'science', due to the more technical character of the environmental threats at the time of the PP's introduction in IEL;[11] however, human activities such as the exploitation of natural resources (often within Indigenous lands) have a wide range of potential impacts and uncertainties that go beyond biological or ecological questions, into the realms of human dynamics.[12] Thus, a narrow approach could

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Precautionary Principle: A Discussion of the Principle's Meaning and Status in an Attempt to Further Define and Understand the Principle", (8N.Z.J.Envtl.L137 2004), p 138.

[2] See for instance, P. Sandin, "Dimensions of the Precautionary Principle", Human and Ecological Risk Assessment: An International Journal (1999); and R. Harding and E. Fisher (eds), *Perspectives on the Precautionary Principle*, (Federation Press, 1999), Appendix.

[3] Such as the Convention on Biological Diversity ('CBD'), UNTSvol.1760, p. 79, 5 June 1992 (entry into force 29 December 1993), Preamble.

[4] See the Convention for the Protection of the Marine Environment of the North-East Atlantic, signed 22 September 1992 (entry into force 25 March 1998), 2354UNTS67; 32ILM1069 (1993), (OSPAR Convention), Preamble.

[5] UN Framework Convention on Climate Change ('UNFCCC'), 1771UNTS107; UN Doc. A/AC.237/18(Part II)/Add.1; 31ILM849 (1992), Article 3.3.

[6] See section 2.1.

[7] N. De Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules* (OUP, 2002), p 91.

[8] Also known as the preventive principle. Ibid., p 61.

[9] P. Birnie, A. Boyle, and C. Redgwell, *International Law and the Environment* (3rd Edition, OUP, 2009), p 156.

[10] A. Trouwborst, *Precautionary Rights and Duties of States* (Martinus Nijhoff, 2006), pp 98 and 115-116. See also section 3.2.

[11] See sections 3.2 and 4.3.

[12] R. Cooney, "A long and winding road? Precaution from principle to practice in biodiversity conservation" in E. Fisher, J. Jones and R. von Schomberg (eds) *Implementing the Precautionary Principle: Perspectives and Prospects* (Elgar, 2006), p 230.

result in ineffective precautionary measures by overlooking possible threats or elements relevant to avoid potential harm, not only to the environment, but also to humans. In practice, this is attenuated by balancing socio-economic considerations when adopting precautionary measures, [13] as it is also recognised in some formulations of the PP. [14] However, what are often absent are cultural/spiritual considerations, particularly relevant in situations where Indigenous peoples are involved, because of the special relationship that they have with their territories,[15] being then their traditional way of life seriously threatened by the effects of these human activities.

Following this, it is important to highlight the importance of these non-environmental considerations in the implementation of the PP, looking into adopting a broader notion of 'scientific uncertainty' by integrating other sources of 'scientific knowledge'. In the case of Indigenous peoples, this would not only enable the incorporation of their traditional knowledge[16] and their understanding of risks and uncertainties about their way of life in the decision-making process, but also extend the PP to address these risks, in line with other instances where the PP has been applied to avoid the materialisation of potential impacts on Indigenous peoples' cultural and spiritual values.

This chapter is divided into five sections; section two first contextualises the origins of the PP and its development in IEL, moving then to the questions of the PP as a 'principle' or an 'approach' and its legal status, supporting the view that the PP's role of providing guidance and informing States [17] in adopting effective and proportionate action conforms better to the argument that it is a general principle of international law. In section three, I analyse the elements [18] of threat; serious or irreversible harm; and scientific uncertainty, including its development and some issues with its narrow approach. Section four focuses on the PP in action, including

[13] Birnie, et al (n 9), p 163, noting that States consider "their own capabilities, their economic and social priorities, cost-effectiveness of proposed measures and nature and degree of the environmental risk" when assessing the adoption of precautionary measures.
[14] See section 4.3.
[15] See Chapter III, section 3.
[16] The issue of traditional knowledge a source of scientific knowledge in international law is addressed in Chapter III, section 4.1.
[17] J. Cameron, "The Precautionary Principle: Core meaning, constitutional framework and procedures for implementation" in Harding and Fisher (n 2), p 30.
[18] As mentioned in section 3, there are differences regarding the elements of the PP in the literature.

the duty to adopt effective and proportionate measures; the alleged reversal of the burden of proof (and the related issue of the standard of proof);[19] and finally, the importance of non-environmental considerations in avoiding the materialisation of non-negligible harm, with a particular focus on cultural considerations, the situation of Indigenous peoples and the expansion of the notion of 'scientific uncertainty' to incorporate their traditional knowledge. Section five closes the chapter with some concluding remarks.

2. Contextualising the Precautionary Principle

2.1 Origins, formulations and the principle/approach question

The PP appeared for the first time in international law during the 80's, in the Second International Conference on the Protection of the North Sea ('London Ministerial Declaration'),[20] but its origins can be traced to the German *Vorsorgenprinzip* (literally, principle of foresight),[21] addressing the introduction of potentially harmful new substances in an industrial context in the face of scientific uncertainty.[22] It continued to gain influence during the late 80's and early 90's, mostly in IEL,[23] being included in several international binding and non-binding instruments,[24] with variations. For instance, the London Ministerial Declaration notes that the 'principle of precautionary action' applies "when there is reason to assume that certain damage or harmful effects on the living resources of the sea are likely to be caused" by persistent and toxic substances, "even where there is no scientific evidence to prove a

[19] See section 4.2.
[20] Paras. VII, XV and XVI of the "Second International Conference on the Protection of the North Sea," London, 24-25 November 1987.
[21] See for example, Birnie et al (n 9), p 154; p 4; M. Pyhälä, A. Brusendorff and H. Paulomäki, "The Precautionary Principle" in M. Fitzmaurice; D. Ong and P. Merkouris (eds) *Research Handbook on International Environmental Law* (E. Elgar, 2010) p 205; and J. Wiener, "Precaution" in D. Bodansky, J. Brunée and E. Hey (eds), *The Oxford Handbook of International Environmental Law* (OUP, 2014), p 599.
[22] B. Moyle, "Making the Precautionary Principle Work for Biodiversity: Avoiding Perverse Outcomes in Decision-making Under Uncertainty", in R. Cooney and B. Dickson (eds), *Biodiversity and the Precautionary Principle: Risk and Uncertainty in Conservation and Sustainable Use* (Earthscan, 2005), p 276. See also section 3.2.
[23] Trouwborst (n 10), pp 12-13, noting that it is also present in other fields like health and international security. See also De Sadeleer, (n 7), pp 103-108.
[24] See Harding and Fisher (n 2), Appendix: Statements of the Precautionary Principle and Wiener (n 21), p 601.

causal link between emissions and effects";[25] Principle 15 of the Rio Declaration ('Principle 15'), [26] arguably the most well-known formulation of the PP in international law, [27] states that "[i]n order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation";[28] the Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa ('Bamako Convention'), refers to the precautionary 'principle' and 'approach', which is to be implemented to prevent "the release into the environment of substances which may cause harm to humans or the environment without waiting for scientific proof regarding such harm";[29] and the 1995 Straddling Fish Stock Agreement considers the precautionary 'approach' as a general 'principle' that States shall apply.[30] Finally, some international conventions do not mention the word 'precaution' at all,[31] while others refer to the 'precautionary principle'.[32]

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[25] Para. XVI.

[26] 1992 Rio Declaration on Environment and Development ('Rio Declaration'), UN Doc. A/CONF.151/26 (vol. I)/31ILM 874(1992), Principle 15. Sands mentions that the core of the PP is in this formulation. P. Sands, *Principles of International Environmental Law"* (2nd edition, CUP 2003), p 268. The Rio Declaration was adopted by consensus by 176 States and it has almost universal acceptance. See P. Birnie and A. Boyle, *Basic Documents on International Law and the Environment* (Oxford, 1995), p 9.

[27] Aside from its broad support, Principle 15 is important because it confirms the incorporation of the PP in IEL. See D. Freestone, "The road from Rio: International Environmental law after the Earth summit" 6J.Envtl.L.193(1994), p 212; Trouwborst (n 10), p 23; and J. Viñuales, "The Rio Declaration on Environment and Development: A Preliminary Study" in J. Viñuales (ed), *The Rio Declaration on Environment and Development*: *A Commentary* (OUP, 2015), pp 39-40. This formulation is often included in other international instruments, like the Cartagena Protocol on Biosafety to the CBD ('Cartagena Protocol'), 2226UNTS208; 39ILM1027(2000), Preamble; and the Stockholm Convention on Persistent Organic Pollutants, ('POPs Convention') 22 May 2011 (entry into force 17 May 2004) 2256UNTS119; 40ILM532(2001), Article 1, among others.

[28] The inclusion of the word "approach" was due to US insistence. Birnie et al (n 9), p 155 and Viñuales (n 27), p 39.

[29] E/CN.4/RES/1991/47, 29 January 1991 (entry into force 22 April 1998), Article 4.3 (f).

[30] Agreement for the Implementation of the Provisions of the UN Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks ('1995 Straddling Fish Stock Agreement'), Article 5 (c).

[31] See CBD Preamble, noting that "where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat."

[32] See for example, OSPAR Convention, Preamble and Article 2; the Convention on the Protection and Use of Transboundary Watercourses and International Lakes ('Water Convention')(entry into force 6 October 1996), UNTS vol.1936, p.269, Article 2.5; and the Convention on the Protection of

This small sample of formulations in international instruments showcase the lack of clarity that surrounds this notion, being "difficult to speak of a single precautionary principle at all".[33] This extends to international cases, where applicants tend to refer to a precautionary 'principle' to strengthen their arguments,[34] and respondents insist on a precautionary 'approach', implying that there is no obligation to act in a precautionary way.[35] Courts and judges have regularly been very cautious about this point: for instance, the International Court of Justice ('ICJ') and the International Tribunal for the Law of the Sea ('ITLOS') acknowledged the existence of a 'precautionary approach'[36] although dissenting and separate opinions do refer to the 'precautionary principle';[37] similarly, the World Trade Organisation dispute settlement system (which is not a court) has also relied on 'approach'.[38] In any case, and despite some attempts to differentiate these terms,[39] doctrine,[40] international practice and the flexible nature of the PP (see below) do not support a distinction

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the Marine Environment of the Baltic Sea Area, ('Helsinki Convention')(entry into force 17 January 2000) 1507 UNTS 167; 1994OJ(L73)20; 13ILM546(1974), Article 3.

[33] D. Bodansky, "Scientific Uncertainty and the Precautionary Principle", 33(7) Environment:4, p 5.

[34] See for example, International Tribunal for the Law of the Sea, the MOX Plant Case (Ireland v. United Kingdom), "Request for provisional measures and Statement of case submitted on behalf of Ireland" and the Southern Bluefin Tuna Cases (New Zealand v. Japan; Australia v. Japan), "Request for the prescription of Provisional Measures submitted by New Zealand"; and some cases before the ICJ like "Gabčíkovo-Nagymaros Project (Hungary/Slovakia)", Memorial of the Republic of Hungary-volume 1; "Pulp Mills on the River Uruguay (Argentina v. Uruguay)," Memorial of Argentina; "Aerial Herbicide Spraying (Ecuador v. Colombia)," Memorial of Ecuador-volume 1; WTO Appellate Body Report, "EC Measures Concerning Meat and Meat Products ('EC-Hormones')," WT/DS26/AB/R, WT/DS48/AB/R, adopted 13 February 1998, DSR 1998:I, where the EC argued the PP as a basis for its case.

[35] See for instance ICJ "Aerial Herbicide Spraying", Counter-memorial of Colombia-volume I, para. 8.57 arguing that the PP does not constitute an international obligation and it is an 'approach' rather than a principle; a similar argument was used by the US in the EC-Hormones case, paras. 60 and 122.

[36] Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, ICJ Reports 2010, p. 14, ('Pulp Mills') para. 164; Responsibilities and obligations of States with respect to activities in the Area, Advisory Opinion, 1 February 2011, ITLOS Reports 2011, p. 10, para. 135.

[37] See for example, Nuclear Tests case, Order of 22 September 1995, Dissenting Opinion of Judge Weeramantry and Dissenting Opinion of Judge ad-hoc Palmer; in Gabčíkovo-Nagymaros, Separate Opinion of Judge Koroma; in Pulp Mills, Joint Dissenting Opinion of Judges Al-Khasawneh and Simma, Separate Opinion of Judge Cançado Trindade and Dissenting Opinion Judge ad-hoc Vinuesa.

[38] See for instance EC-Hormones, Appellate Body Report and European Communities-Measures affecting the approval and marketing of Biotech products, Report of the Panel, Doc WT/DS291-293/INTERIM. 29 September 2006.

[39] See footnote 35 and ITLOS Southern Bluefin Tuna, Separate Opinion of Judge Laing, para. 19: "(…)adopting an approach, rather than a principle, appropriately imports a certain degree of flexibility and tends, though not dispositively, to underscore reticence about making premature pronouncements about desirable normative structures."

[40] See M. Ahteensuu, "In Dubio pro Natura? A Philosophical Analysis of the Precautionary Principle" in Environmental and Health Risk Governance Vol. 20 (2008) University of Turku, Finland, p 35, noting that most authors used them as synonyms; Trouwborst (n 10), p 12; De Sadeleer (n 7), p 92.

between them, and they are generally used interchangeably in international law.[41] As noted by the International Law Commission ('ILC'), "the two concepts lead to similar results in practice when applied in good faith".[42] Following this, I will use both terms interchangeably throughout my work.

2.2. The Precautionary Principle and International Environmental Law

As noted above, the PP is present in several IEL instruments across a wide range of topics (e.g., marine pollution, climate change, and biological diversity), often with their own formulation of this principle.[43] To understand why this is the case, it is necessary to take a step back and briefly refer to IEL and its characteristics.

The main goal of IEL is the protection of the environment,[44] a very broad notion that can be defined in different ways for different purposes.[45] For instance, the 1987 Bruntland Report on Environment and Development says that the environment "does not exist as a sphere separate from human actions, ambitions, and needs(…) the environment is where we all live",[46] and the ICJ in the 1996 Legality of the Threat or Use of Nuclear Weapons Advisory Opinion remarked that "the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn".[47] Another understanding of what

[41] See Freestone (n 27), p 212; E. Hey, "The Precautionary Concept in Environmental Policy and Law: Institutionalizing Caution", 4 Geo. Int'l Envtl. L. Rev. 303 (1991-1992), p 304; Trouwborst (n 10), p 11; and Birnie et al (n 9), p 155.

[42] ILC, "Draft Articles on the Law of Transboundary Aquifers, with commentaries" (2008), Article 12 commentary, p 59.

[43] Birnie et al (n 9) pp 157-158.

[44] Ibid, p 2; see also, S. Maljean-Dubois, "The making of International Law challenging environmental protection" in Y. Kerbrat and S. Maljean-Dubois (eds), *The Transformation of International Environmental Law* (Hart publishing, 2011), p 28.

[45] ILC, "Draft Principles on the allocation of loss in the case of Transboundary Harm arising out of Hazardous Activities, with commentaries" (2006) Principle 2, para. 19. Sands makes a brief recount of several direct and indirect definitions in international law. Sands (n 26), pp 15-18. Redgwell says that 'environment' is an amorphous term, so far "proved incapable of precise legal definition save in particular contexts." C. Redgwell, "International Environmental Law" in M. Evans (ed), *International Law* (4th ed, OUP 2014), p 689.

[46] "Report of the World Commission on Environment and Development: Our Common Future" UNGA Res. 42/187 (1987).

[47] Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, ICJ Reports 1996, p. 226, para. 29, noting how the effects on the environment could last over several generations.

constitutes the environment is the one held by Indigenous peoples, who usually consider themselves and every element of the environment as a whole.[48]

In essence, 'environment' is a very general concept that encompasses the place where we live and develop, and the way we relate and interact with it. As such, thanks to the different scientific breakthroughs about our understanding of nature and the ways to protect it, it is a notion constantly evolving. Thus, in order to incorporate new information and adopt measures to address changing threats,[49] IEL relies on broad notions (like 'sustainable development' [50] or 'damage'), [51] framework conventions[52] and soft-law instruments (like declarations) capable of being modified or subsequently complemented.[53] Yet, there are still some issues that remain outside our current understanding [54] (e.g., long term impacts, unknown or unexpected interactions) which means that IEL is bound to coexist with a degree of scientific uncertainty at any given time; this in turn can represent a serious threat to the environment, since uncertainty could mask 'invisible' risks, preventing effective action until it is maybe too late.[55]

It is against this background of changing problems, *ad hoc* instruments, adaptable concepts and uncertainties that the PP appeared and evolved in IEL, as an

[48] See Chapter III, section 2, as well as F. Berkes, *Sacred Ecology* (3rd edition, Routledge 2012), p 33 recounting the Australian aboriginal conception of the environment and S. Venne, "The New Language of Assimilation" in Without Prejudice Vol. II No 2 (1989), p 54 noting how the Indigenous worldview "centers on our relationship with the land, the animals, the fish, the plants, the lakes and rivers(…) we do not view ourselves as being separate and distinct from the world around us".

[49] Like classifying a new element as a pollutant or protecting a recently endangered species. Y. Kerbrat and S. Maljean-Dubois, (n 44), p 29.

[50] See for instance V. Lowe, "Sustainable Development and Unsustainable Arguments" in A. Boyle and D. Freestone, *International Law and Sustainable Development: Past Achievements and Future Challenges* (OUP 1999).

[51] See ILC Draft Principles (n 45), footnote 322.

[52] Which are treaties that establish general obligations, elaborated more precisely in subsequent instruments such as protocols or annexes. These obligations could detail, *inter alia,* specific commitments (e.g., UNFCCC article 4(2) and Annex I), the regulation of activities concerning species (Convention on International Trade in Endangered Species of Wild Fauna and Flora Article 2 and Appendices) or the inclusion of new substances that need to be limited (POPs convention and Annexes).

[53] For example, the Montreal Protocol on Substances that Deplete the Ozone Layer, 1522UNTS3; 26ILM 1550(1987) complements the Vienna Convention for the Protection of the Ozone Layer, UNTS vol.1513, p.293 (1988).

[54] Bodansky et al, "International Environmental Law: Mapping the field", in Bodansky et al (n 21), p 7.

[55] J. Peel, "Changing Conceptions of Environmental Risk" in Viñuales (n 27), pp 75 and 79.

answer to how to deal with uncertainty in different areas[56] and playing a role in situations where causation is not fully demonstrated.[57] Considering this, a rigid definition of the PP would not be desirable or necessary; the strength and usefulness of this principle resides precisely on its broadness and flexibility,[58] and hence the several formulations of the PP in international law mentioned above.

In sum, a good way to understand the difficulty of having a single definition of the PP lies on its relationship with IEL. The PP has evolved as a flexible concept capable of providing guidance in different topics because first, it is needed as an adaptable notion in order to deal with various kinds of uncertainties and ever-changings threats to the environment, and second, it allows for the incorporation of evolving knowledge to address the former. A rigid definition would be unsuitable for this role of influencing States in decision-making to avoid the materialisation of harm, simply because the PP does not impose particular norms or directly prescribe a conduct, but recommends courses of action, based on ongoing developments regarding information, uncertainties and effects.

2.3. Legal status of the Precautionary Principle

The legal status of the PP is a controversial issue in which there appears to be no agreement. There seems to be a minority position which denies its importance in international law,[59] and a majority that defend its legal force, i.e., a source of an

[56] For instance, potential risks from the introduction of a new chemical element are different than in biodiversity, in which environmental harms result not from new activities or products but from "incremental impacts of well understood acts". Cooney (n 12), p 230. See also section 4 below.

[57] De Sadeleer (n 7), p 222, noting how the PP "transforms doubt into possible certainty and hence strengthens action by the public authorities in the face of uncertainty." See also Birnie et al (n 9), p 156; and Pyhälä et al (n 21), p 205.

[58] 'Paradoxically, we conclude that the application of precaution will remain politically potent so long as it continues to be tantalizingly ill-defined and imperfectly translatable into codes of conduct, while capturing the emotions of misgiving and guilt… [I]t is neither a well-defined nor a stable concept'. A. Jordan and T. O' Riordan, 'The Precautionary Principle in Contemporary Environmental Policy and Politics,' in C. Raffensperger and J. Tickner (eds.), *Protecting Public Health and the Environment: Implementing the Precautionary Principle* (Island Press, 1999), p 15. These characteristics are also important for the way science (and scientific uncertainty) work, which is, at the risk of oversimplifying, starting with tentative hypotheses and see which one is able to better explain the facts; yet, as noted by Sagan, "absolute certainty will always elude us". C. Sagan, *The Demon-Haunted World: Science as a Candle in the Dark* (Headline Book Publishing, 1997), p 31.

[59] C. Sunstein, "Beyond the Precautionary principle", University of Pennsylvania Law Review, Vol. 151, No. 3 (January 2003), p 1023, and *Laws of Fear: Beyond the Precautionary Principle* (Cop, 2005); see also A. Wildavsky, *But is it True? A Citizen's Guide to Environmental Health and Safety*

obligation that translates into the adoption of measures to avoid potentially serious/irreversible environmental harm, [60] either as a general principle of international law[61] or as customary law.[62] In order to analyse this issue, I will first briefly review the conceptual difference between principles and rules in order to see if the PP is actually a principle, and then I will address the point of being a general principle of international law.

2.3.1 Principles and rules

The ICJ has not defined what a principle is, although in one case assimilated "principles" to "rules", noting that the former are more general and fundamental than the latter.[63] For their part, several authors have given definitions that include the function of a principle; for instance, Beyerlin states that "principles can be understood as norms that are first and foremost designed to give guidance to their addressees for future conduct in rule-making processes, as well as to shape the interpretation and application of rules already in existence". [64] They would be different than rules in the sense that rules are norms that directly prescribe a conduct (take action, refrain from action or achieve a fixed result) whereas a principle's objective is to influence States' decision-making "which otherwise remains open to choice, as well as their interpretation of the rules".[65] He also adds that principles can

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Issues (Harvard University Press 1997) "Conclusion: Rejecting the Precautionary Principle"; and Marchant (n 1), p 1802.

[60] M. Biddulph and D. Newman, "A Contextualized Account of General Principles of International Law", 26PaceL.Rev.286, 344(2014), p 314; R. Kolb, "Principles as Sources of International Law (with special reference to good faith)", Netherlands International Law Review, vol. 53, no.1(2006), p 12.

[61] A. Boyle, "Soft law in international law-making", in Evans (n 45), p 130; Birnie et al (n 9), pp 159-164; Cameron (n 17), p 30; Biddulph and Newman (n 60), p 310, also noticing that it is unclear if there is enough State practice to consider it custom.

[62] A. Trouwborst, *Evolution and Status of the Precautionary Principle in International Law* (Kluwer, 2002), p 52; O. McIntyre and T. Mosedale, "The Precautionary Principle as a Norm of Customary International Law" 9 Journal of Environmental Law 221(1997); A. Sirinskiene, "The Status of Precautionary Principle: Moving towards a Rule of Customary Law." Jurisprudence 4(118)(2009), among others.

[63] ICJ, "Delimitation of the Maritime Boundary in the Gulf of Maine Area", Judgment, ICJ Reports 1984, p. 246, para. 79. See also Biddulph and Newman (n 60), pp 291-302, noting that there is a lack of consensus regarding what a general principle of international law is.

[64] U. Beyerlin, "Different types of norms in International Environmental Law: Policies, Principles and Rules" in Bodansky et al, (n 21), p 437.

[65] Ibid.

be characterized as "imperfect norms" that lack the normative force that rules have.[66] Lang mentions that principles are "a norm of a general nature which gives guidance to state behaviour, but are not directly applicable; the violation of such principles cannot be pursued in international courts unless they are made operational by means of more concrete norms."[67] Similarly, Dworkin states that legal principles "do not set out legal consequences that follow automatically when conditions provided are met" and that a principle must be taken into account by officials "if it is relevant, as a consideration inclining in one direction or another".[68] Bodansky argues, in line with Dworkin, that "principles embody legal standards, but the standards they contain are more general than commitments and do not specify particular actions."[69] Finally, De Sadeleer contends that because of their nature, legal principles are not subject to an exhaustive definition because it would restrict its meaning; instead, "what is sought is a flexible norm able to adapt to the heterogeneous situations in which it will be used."[70] Thus, principles have a more general character than rules; they exist to provide guidance and influence States' behaviour in decision-making, and have also a role of interpretation and the filling of gaps, although the latter function probably belongs more to the judicial sphere. They are not intended to be automatically applied, neither are they able to directly prescribe particular conduct, otherwise they would not be principles, but rules.

As noted by Cameron, the PP informs States in the adoption of effective measures to protect the environment,[71] and similarly, De Sadeleer mentions that the PP set "the conditions for action without actually describing that action, thus leaving a wide margin" for implementation,[72] having then an incomplete normative character.[73] In other words, it provides guidance certain situations (threats of non-negligible harm to the environment in the face of scientific uncertainty), which, added to its flexible nature illustrated by its various formulations, indicates that the

[66] Ibid.
[67] W. Lang, "The United Nations and International Environmental Law", Geneva Yearbook IX (1995), p 52.
[68] R. Dworkin *Taking Rights Seriously* (Harvard University Press, 1978), pp 25-26.
[69] D. Bodansky, 'The United Nations Framework Convention on Climate Change: A Commentary', 18 Yale Journal of International Law 451(1993), p 501.
[70] De Sadeleer (n 7), pp 173-174.
[71] Cameron (n 17), p 30.
[72] De Sadeleer (n 7), p 370.
[73] Ibid., p 368, noting the PP has "sufficient legal force to be considered normative-that is, giving rise to legal effects" but its normative character is different than other, more complete norms.

PP fits the notion of 'principle' instead of 'rule', which is more specific. Is it then a general principle of international law?

2.3.2 Approaches to general principles of international law

The Statute of the ICJ mentions the "general principles of law recognized by civilized nations"[74] as a source to decide disputes, filling gaps in law and prevent a *non liquet* situation.[75] The meaning of the words in the Statute have been subject to different interpretations, with two major views in this respect: one that argues in favour of a 'domestic'[76] or 'narrow'[77] approach, defending the idea that general principles must be found in all or a majority of national legal systems; and a 'broader'[78] or 'hybrid' approach,[79] defending that this expression also includes general principles drawn from the international arena. This last one seems to be the majority view,[80] supported also by the reliance of international courts on general principles of international law without resorting to domestic law.[81]

As mentioned by a majority of authors, the role of a general principle is not only to fill gaps, but also to assist in interpreting, applying and developing other norms;[82] as such, they can be used to introduce changes in existing law and influence and guide State behaviour.[83] In this connection, and in order to fulfil this role,

[74] UN, Statute of the International Court of Justice, 18 April 1946, Article 38.1.
[75] See ICJ, "North Sea Continental Shelf", Judgment, I.C.J. Reports 1969, p. 3. See also M. Aznar-Gomez, "The 1996 Nuclear Weapons Advisory opinion and Non Liquet in International Law", International and Comparative Law Quarterly Vol. 48 (1999).
[76] Biddulph and Newman (n 60), pp 298-299.
[77] T. Kleinlein, "Customary International Law and General Principles: Rethinking their Relationship" in B. Lepard, (ed) *Reexamining Customary International Law* (CUP 2017), p 134.
[78] Ibid., saying that this approach distinguishes three categories: principles that come from domestic law, general principles originated in international relations and general principles applicable to all kind of legal relations.
[79] Biddulph and Newman (n 60), pp 299-300, noting that general principles can be adapted from domestic law and also directly from the international order.
[80] Ibid; see also B. Simma and P. Alston, "The Sources of Human Rights Law: Custom, Jus Cogens and General Principles", 12 Aust. YBIL 82 (1988-1989), p 102; D. Moeckli, S. Shah and S. Sivakumaran (eds), *International Human Rights Law* (OUP 2014, 2nd edition), p 85; H. Thirlway, "The Sources of International Law" in M. Evans (n 45), pp 104-105.
[81] J. Rehman, *International Human Rights Law* (2nd edition, Pearson 2010), pp 23-24. Kleinlein mentions the example of the International Criminal Court. Kleinlein (n 77), pp 136-137.
[82] Boyle (n 61), p 128; Kleinlein (n 77), pp 142-143; Redgwell notes that general principles of international law influence the interpretation of treaty provisions and judicial decisions and the application of custom. Redgwell, (n 45), p 697, among others.
[83] A. Boyle and C. Chinkin, *The Making of International Law* (OUP 2007), p 225.

general principles need to be endorsed by States, as Article 38 of the ICJ Statute implies when it uses the words "recognized by civilized nations",[84] or, in the words of Boyle, "what gives general principles(…) legitimacy and authority is *opinio iuris*."[85]

The question of where to look for evidence of *opinio iuris* has been addressed by the ICJ in the *Nicaragua* case,[86] ruling that it can be deduced from international treaties as well as the attitude of States towards soft law instruments[87] like UN General Assembly resolutions or resolutions of other international organizations,[88] albeit some authors argue that support for binding and non-binding sources is also an example of State practice,[89] which, in my opinion, seems to contradict international courts' jurisprudence, as noted by Boyle and Chinkin,[90] but the controversy remains.

[84] See B. Cheng, *General principles of Law as applied by International Courts and Tribunals* (Cambridge, reprinted 2006), p 24, comparing the requirements of custom (widespread and consistence practice plus *opinio iuris*) and general principles, where practice is absent. See also Kleinlein, noting that some scholars consider that general principles, like custom, also require State practice but to a lesser degree, which would go against the distinction included in Article 38 of the ICJ Statute and in contravention of international judicial practice, also highlighting that when the ICJ does not find enough State practice to consider a norm as custom, it refers to it as a principle. Kleinlein (n 77), pp 144-147.

[85] Boyle (n 61), p 129, defining *opinio iuris* as "evidence of a belief that [State] practice is rendered obligatory by the existence of a rule of law requiring it"; North Sea Continental Shelf cases, para. 77.

[86] ICJ, "Military and Paramilitary Activities in and against Nicaragua" (Nicaragua v. United States of America), Jurisdiction and Admissibility, Judgment, ICJ Reports 1984, ('Nicaragua case') p. 392, paras. 188-189.

[87] Boyle defines soft law as a "convenient description for a variety of non-legally binding instruments used in contemporary international relations by States and international organizations." Boyle (n 61), p 119. Shelton refers to soft law as non-legally binding instruments "containing principles, norms, standards, or other statements of expected behaviour." D. Shelton, "International Law and Relative Normativity" in M. Evans (n 45), p 159. Despite their non-binding character, soft-law instruments are far from being deprived of legal importance; in effect, they are carefully negotiated so there is at least a good faith commitment involved in the adoption of a soft law instrument, and they may provide evidence of *opinio iuris* or State practice, depending on the context. Boyle (n 61), pp 120 and 128. See also Boyle and Chinkin (n 83), p 214 and Birnie et al (n 9), pp 34-35.

[88] Nicaragua case, paras. 188-189.

[89] See for instance, J. Wouters and C. Ryngaert, "The Impact of Human Rights and International Humanitarian Law on the Process of the Formation of Customary International Law" in M. Kamminga and M. Scheinin (eds) *The Impact of Human Rights Law on General International Law* (OUP 2009), p 115 and ILC, "Report of the International Law Commission Sixty-eighth session" A/71/10(2016), pp 91-92, noting that acts of States regarding negotiation, adoption and implementation of treaties and non-legally binding resolutions, decisions and other acts adopted by States within international organizations can count as practice, although later also notes that "statements are more likely to embody the legal conviction of the State", p 99.

[90] Boyle and Chinkin (n 83), p 215; see also A. Roberts, "Traditional and Modern Approaches to Customary International Law: A Reconciliation" (2001), p 789.

2.3.3 The Precautionary Principle as a general principle of international law

As noted above, the PP originated in German domestic law, but it has evolved and developed mainly in the IEL field, being incorporated in various international instruments with widespread support (treaties like the UNFCCC and the CBD and soft-law ones[91] like the Rio Declaration), showing abundant evidence of *opinio iuris*, in accordance with the broad model ideal of a general principle.[92] As to its role, it is clear that the PP fill gaps and guides States in situations of threats of serious harm to the environment and scientific uncertainty across different fields and contexts such as biodiversity, climate change, marine pollution, human health and even trade,[93] among others, and actually influences the development of other international norms (like the EU Directive regarding genetically modified organisms);[94] this is possible thanks to its flexible nature, making it able to adapt to various circumstances, in contrast with the more rigid structure of an international rule, which has well-defined requirements that must be followed.[95] At the same time, there are several formulations of the PP that diverge in a range of issues like the type of risks that triggers the application of the principle; if it applies only to the environment or also to other risks; and if non-environmental considerations should be taken into account and which ones, among others.[96] Wiener highlights that it is unclear which type of action should be adopted by States when this principle is triggered (with some versions simply stating that uncertainty is no excuse for inaction),[97] allowing States

[91] In this sense, see Boyle (n 61), p 130, noting that "widespread acceptance of soft law instruments will tend to legitimize conduct and make the legality of opposing positions harder to sustain."
[92] Biddulph and Newman (n 60), p 310.
[93] As mentioned above. See also, C. Mercado, "Erring on the Side of Precaution: An Assessment of the Application of the Precautionary Principle in International Trade Law," Ateneo Law Journal 62, no. 3 (2018).
[94] EU Directive 2015/412 of the European Parliament and of the Council, 11 March 2015.
[95] De Sadeleer (n 7), pp 308-309.
[96] Wiener (n 21), p 601, noting that there are versions of the PP in over 50 multilateral instruments, including treaties and soft-law instruments; see also Inter-American Court of Human Rights ('IACtHR'), "Advisory Opinion OC-23/17 of November 15, 2017 Requested by the Republic of Colombia: The Environment and Human Rights (State obligations in relation to the environment in the context of the protection and guarantee of the rights to life and to personal integrity: interpretation and scope of Articles 4(1) and 5(1) in relation to Articles 1(1) and 2 of the American Convention on Human Rights)" ('IACtHR Advisory Opinion'), paras. 176-178.
[97] Wiener (n 21), p 603.

to adopt a broad range of actions to implement this principle,[98] such as Environmental Impact Assessments ('EIA'); research; participatory decision-making procedures; bans; and even the establishment of taxes or subsidies; but in general, "any measure can be a precautionary measure".[99] Following this, even an administrative delay that results in the avoidance of a serious impact could be considered as a precautionary measure.

The range of existing alternatives makes it difficult to argue that there is widespread and consistent State practice to consider the PP as customary law;[100] instead, I agree with the opinion that the PP is a general principle of international law. As such, the PP has an important role guiding States and when courts and decision-makers decide cases and interpret treaties[101] (as noted by the ICJ[102] and the IACtHR),[103] in situations of potentially serious threats of harm, where it is necessary to adopt effective precautionary action, but leaving a discretionary margin to decide which measure(s) are to be taken.[104] In other words, the PP, as a general principle of international law, does not impose the adoption of particular actions; as long as States are able to adopt effective and proportionate measures to avoid the

[98] R. von Schomberg, "The Precautionary Principle and its normative challenges" in Fisher et al (n 12), p 25; E. Fisher, "Precaution, Precaution Everywhere: Developing a 'Common Understanding' of the Precautionary Principle in the European Community", 9Maastricht J. Eur. & Comp. L.7(2002), p 15; O. Pedersen, "From Abundance to Indeterminacy: The Precautionary Principle and Its Two Camps of Custom", Transnational Environmental Law, Vol 3 Issue 2 (2014), pp 9-11; P-M. Dubois, "Formation of Customary International Law and General Principles" in Bodansky et al (n 21), pp 452-453.

[99] Trouwborst (n 10), pp 177-179.

[100] Pedersen (n 98), pp 15-16, noting that in following a traditional approach to what constitutes a norm of customary law, which emphasizes the existence of strong State practice, the PP cannot be considered as having a customary law status; Dubois (n 98), p 464, highlighting that the skepticism about the customary nature of the PP is understandable because "[S]tate practice is sparse and often inconsistent."

[101] Boyle, (n 61), p 133; Boyle and Chinkin (n 83), p 223; Biddulph and Newman (n 60), p 310, among others.

[102] See Pulp Mills judgment, para. 164, noting that "a precautionary approach may be relevant in the interpretation and application of the provisions of the Statute"; see also ITLOS, "Responsibilities and obligations of States with respect to activities in the Area", Advisory Opinion, para. 135.

[103] See IACtHR Advisory Opinion para 180, noting that it is necessary to consider the PP in interpreting States' obligations under the American Convention on Human Rights.

[104] Ibid., noting that States must adopt effective measures when there are plausible indications of potentially severe and irreversible environmental damage, without detailing which type of actions are needed, leaving this decision to States; see also Beyerlin (n 64), p 440, saying that it is not at the discretion of States to adopt adequate precautionary action when the factors that trigger the PP are present, but "[d]iscretion exists only as to the choice of measures to be taken"; and von Schomberg (n 98), p 23, among others.

materialisation of potentially serious environmental harm, the precautionary duty is discharged.

As a flexible principle applicable in several fields in international law, the PP has been expressed in different ways; yet, throughout its different formulations a basic core can be identified, to which I now turn.

3. A common understanding of the Precautionary Principle

The idea of looking for common elements in the different formulations, showing the existence of a basic understanding, is perhaps more adequate than trying to come up with a general formula that accurately captures the essence and flexibility of the PP. This has been explored by several authors, although not in a uniform way; for instance, Trouwborst proposes 3 elements (threat of environmental harm, uncertainty and action);[105] Boisson de Chazournes identifies 4 criteria, 3 *a priori* (risk, damage and scientific uncertainty) and 1 *a posteriori* (capacities);[106] Sandin considers that there are 4 dimensions (threat, uncertainty, action and command);[107] Mead proposes 4 elements (threat of harm, lack of scientific certainty or evidence, cause and effect relationship not proven and necessity or duty to act);[108] and De Sadeleer identifies 3 elements (risk, damage and proportion),[109] to name a few.

In my view, there are three core elements that appear in the different formulations of the PP: threat or risk to the environment, serious or irreversible damage and scientific uncertainty. These elements relate to the German "principle of foresight", the idea of anticipating threats and taking measures in advance to prevent damage to the environment, which in turn underpins the PP. In the presence of these three elements the PP is triggered, and therefore actions to protect the environment (which in my opinion are not an element but rather an effect), must be taken. The first two elements will be analysed together, due to their close relationship, whereas scientific uncertainty will be considered on its own merits.

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[105] See Trouwborst (n 10), in particular Part Two, Definition.
[106] L. Boisson de Chazournes, "Precaution in International Law: Reflection on its Composite Nature in T. Ndiaye and R. Wolfrum (eds), *Law of the Sea, Environmental Law and Settlement of Disputes: Liber Amicorum Judge Thomas A. Mensah* (Martinus Nijhoff, 2007).
[107] Sandin (n 2), p 889.
[108] Mead (n 1), p 150.
[109] De Sadeleer (n 7), p 150.

3.1 Threat of serious or irreversible damage

A threat to the environment involves the idea of an adverse effect, an impact on the environment, an "undesirable state of the world".[110] This possible adverse effect has to be more than a mere change,[111] and constitute a real possibility of damage, in order to avoid overregulation[112] or other negative effects.[113] In some international treaties, this 'threshold of probability' seems to be included; for instance, the OSPAR Convention requires 'reasonable grounds for concern';[114] the 1996 London Protocol requires 'reason to believe'[115] and the Helsinki Convention a 'reason to assume';[116] however, there are others where the consideration of this requirement of probability appears to be implied.[117]

When it comes to the severity of the damage, the terminology varies from 'serious or irreversible damage';[118] to 'significant' damage,[119] or even unclear thresholds, relying on words like 'potential' damages[120] or 'may' cause harm.[121] The terms 'significant' and 'serious' have an unclear meaning, not the least because these notions are subjective or value-charged, in the sense that what is significant/serious for someone could be irrelevant or just a minor disturbance to others; for instance, felling part of a forest may not constitute 'serious' damage compared to the overall surface, but it could be very serious for the Indigenous peoples that consider the

[110] Sandin (n 2), p 891.
[111] Report of the Group of Legal and Technical Experts on Liability and Redress in the Context of Paragraph 2 of Article 14 of the CBD. UNEP/CBD/COP/8/27/ADD3, para. 19, noting that for a change to constitute damage "it had to result in an adverse or negative effect, and it should be measurable." See also Trouwborst (n 10) p 40.
[112] Sunstein (n 59), p 1023.
[113] Overreaction to false or even true positives could result in "opportunities foregone, innovations rejected (including those that would improve human and environmental health), public cynicism about future warnings (…), and new countervailing risks." Wiener (n 21), p 609.
[114] Article 2.2 (a).
[115] 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 36ILM1(1997), Article 3.1.
[116] Article 3.2.
[117] De Sadeleer (n 7) p 173; Trouwborst (n 10), p 47.
[118] Principle 15 and UNFCCC Article 3.3.
[119] CBD, Preamble.
[120] Cartagena Protocol, Preamble and Water Convention, Article 2.5 (a).
[121] OSPAR Convention Article 2.2 a); Helsinki Convention Article 3.2; Bamako Convention, Article 4.3 (f).

forest as sacred land.[122] In this respect, Trouwborst considers that when the threat is 'significant', a State has a right to take precautionary measures, but when it is 'serious or irreversible' it is no longer an option, but a duty.[123]

'Irreversible harm' on the other hand can be a confusing term; every action is 'irreversible' because it occurred in a certain point of time and space and it can't be undone; to this, Trouwborst understands irreversible as "damage (…) that…cannot be undone in the course of several human generations",[124] which I consider is an appropriate definition, emphasizing long-term consequences that cannot be repaired in a short period of time (like radioactive contamination or the extinction of a species) and thus are going to be suffered by future generations; indeed, it would be hard to consider an effect "irreversible" if it is easily undone or efficiently mitigated.

In sum, it is clear that the threat needs to be of a certain degree,[125] at least 'serious' or 'irreversible', as every new development has risks and an extreme PP can effectively paralyse society. This does not mean that States or other actors cannot take precautionary measures before the thresholds are crossed, just that there is no obligation to do so.

3.2 Scientific uncertainty

Before looking at this element, it is convenient to distinguish between the PP and prevention. Both principles have the objective to avoid environmental harm in the face of a threat;[126] the main difference lies in how certain this threat is. The preventive principle,[127] is applicable when there is certainty, i.e., the cause and effect

[122] See IACtHR, "Case of the Saramaka People v. Suriname", ('Saramaka case') Judgment of November 28, 2007 (Preliminary Objections, Merits, Reparations, and Costs), para. 150, noting how a logging company destroyed forests and, in the process, offended the spirits.
[123] Trouwborst (n 10) p 62-67, See also See ILC Draft Principles (n 45), Principle 2 para. 2: where "significant" refers to something more than "detectable" but not at the level of "serious" or "substantial".
[124] A. Trouwborst, "The Precautionary Principle in General International Law: Combating the Babylonian Confusion", RECIEL 16 (2) 2007, p 189.
[125] Pyhälä et al (n 21), p 212.
[126] S. Kravchenko, T. Chowdhury and J. Bhuiyan, "Principles of International Environmental Law" in S. Alam, J. Bhuiyan, T. Chowdhury, R. Tareq and E. Techera (eds) *Routledge Handbook of International Environmental Law* (Routledge, 2013), p 46.
[127] See Sands (n 26), pp 246-249; Pyhälä et al (n 21), p 204; Rio Declaration, Principle 2; and Report of the UN Conference on the Human Environment, Stockholm, 5–16 June 1972, UN Doc. A/CONF.48/14/Rev.1, Principle 21.

relationship is demonstrated,[128] so a risk ("a function of the expected adverse consequences of a particular event and the likelihood of these consequences actually coming about") can be estimated and expressed in numbers in a reliable way[129] and dealt with using normal risk management approaches like defining a threshold.[130]

The PP, on the other hand, applies only when there are likely potential threats,[131] so if there is "little or no room for uncertainty in the calculation of risk, then there is no justification for the PP to be applied at all."[132] Scientific uncertainty (or 'lack of full scientific certainty', as expressed in Principle 15) is therefore the third core element of the PP. We are in the presence of 'scientific uncertainty' when we know (or think we know) the possible impacts but not the chances that these effects will occur,[133] which could be due to a "lack of knowledge, the variability or complexity of nature, or simply the novelty of the activity or technology concerned";[134] but also because of scientific controversy,[135] that is, a "lack of agreement as to the nature and scale of the likely adverse effects",[136] caused by conflicting or unclear evidence or divergent scientific opinions due to different ways of appreciating and evaluating the data available and/or methodology.[137] An example is the issue of long-term effects of the introduction of GMOs, where biotechnologists have made more favourable risk predictions based on analogies with conventional plant breeding, in contrast with ecologists, who also use analogies but argue that the risks are similar to the introduction of certain species in new environments, causing problems like invasion and pests.[138] Finally, the PP is applicable in situations of

[128] De Sadeleer highlights that risks are by nature a question of chance, but qualifying a risk as certain is possible because the link between the cause and the adverse effect is established and it is feasible to calculate the probability of the occurrence. De Sadeleer (n 7) p 158. In any case, absolute certainty does not exist. Trouwborst (n 10), p 97; Boisson de Chazournes (n 106), p 24.
[129] Trouwborst (n 10), pp 86-87.
[130] Von Schomberg (n 98), p 29; European Environment Agency, "Late lessons from early warnings: the precautionary principle 1896–2000", (2001), p. 170, box 16.1.
[131] Pulp Mills, Separate Opinion of Judge Cançado Trindade, para. 62; Pyhälä et al (n 21), p 205; Sands (n 26), p 267.
[132] Birnie et al (n 9), p 156.
[133] "[T]he adequate empirical or theoretical basis for assigning probabilities to outcomes does not exist". European Environment Agency, (n 130), p. 170, box 16.1; Trouwborst (n 10), pp 86-87.
[134] Trouwborst (n 10), p 87.
[135] Mercado (n 93), p 1004, Von Schomberg (n 98), pp 29-30.
[136] European Commission, Science for Environment Policy, *The Precautionary Principle: decision making under uncertainty* (Future Brief 18, 2017), p 5. See also Mercado (n 93), p 1004.
[137] Mercado (n 93), p 1004.
[138] Von Schomberg (n 98), pp 29-30. He notes that the debate has seen the dismissal of the other 'camp' knowledge, despite the plausible reasons behind them.

ignorance, the 'area of the unexpected', where both the potential effects and their likelihood of occurrence are unknown.[139] The European Environment Agency notes the difficulty to respond to ignorance, but also highlights that by giving more importance to the potential irreversibility and long-term effects of certain actions, even if their potential consequences are unknown, it is possible to avoid serious harm; for instance, considering the persistence and bioaccumulation in the environment of a substance would eliminate potential hazards and reduce surprises.

There are different degrees of ambiguity, depending on the scientific data collected and the particular characteristics of the given situation, although it is often possible to at least estimate the chances of adverse impacts, with various degrees of precision. In this context, it is important to note that uncertainty could be: epistemic, deriving from missing/incomplete data and linked to measurement mistakes or biases, being temporary in nature as it can be usually solved with more research; or ontological, which derives from the complexity, variability and dynamism of the system studied, being inherent to it and thus, by definition, not temporary.[140] Although it is not always possible to know in advance which category will be encountered, the PP is applicable to both.[141]

Despite the theoretical distinction between precaution and prevention, in practice it is often difficult to separate both, as it is not uncommon to come across damages from both unforeseeable (precautionary) and known causes in the same situation;[142] thus, when looking at an event that already materialised, it is easier to trace back cause-effect relations, possibly causing a bias towards prevention. Conversely, it may also be difficult to assess the effectiveness of a precautionary measure in avoiding certain effects that did not materialise.

It is important to mention that not every uncertain situation triggers the PP; some degree of evidence, based on the best information available is needed, because

[139] Trouwborst (n 10), p 87. See also Science for Environment Policy (n 136), p 5, noting that the PP can play an important role in addressing multiple layers of uncertainty, including ignorance.
[140] See Cooney (n 12), pp 229-230; and Trouwborst (n 10), pp 85-86. The main example is climate change.
[141] Trouwborst (n 10), pp 85-86.
[142] For instance, see Saramaka case, para. 152, where environmental damage and effects on the Saramaka people were caused by logging and ill-constructed bridges that blocked creeks, with unintended and far-reaching consequences.

there are no zero-risk activities and adopting precautionary action based on intuitions or at the first hint of risk would lead to overregulation, paralysing innovation;[143] in the words of De Sadeleer, "a strong presumption should be sufficient basis for an appeal to precaution, whereas simple intuition excludes its use".[144] In other words, if there is no cause-effect relationship conclusively established, and there is a credible presumption, a reasonable ground for concern regarding potentially serious or irreversible harm, there is a base to trigger the PP.

When we think about 'science' (and by extension 'scientific uncertainty'), what tends to come to mind, as noted by Orford, is an 'ideal model of science' based on the theoretical physics model, where hypotheses that aim to establish universal laws are tested in experiments and examined by peers.[145] Incidentally, the scientific uncertainties that motivated the adoption of the PP were not far from this image, being of a very technical nature, related to the potentially serious effects of new industrial substances or technologies and the efforts to better deal with and understand cause-effect relationships.[146] For example, the 1987 London Declaration states that the PP is necessary to deal with possible effects of 'dangerous substances' in the North Sea,[147] similar to other early references to the PP.[148] As such, this element has been shaped by a narrow understanding of science, based on experiments and natural sciences;[149] however, nowadays environmental risks and uncertainties come often not from insufficiently analysed substances but from human

[143] Wiener (n 21), p 609.
[144] De Sadeleer (n 7), p 159. See also C. Foster, *Science and the Precautionary Principle in International Courts and Tribunals: Expert Evidence, Burden of Proof and Finality* (CUP, 2011), p 257 noting applying the PP to every situation where there is scientific uncertainty can produce "irrational, protectionist, or overly risk-averse" decisions.
[145] A. Orford, 'Scientific Reason and the Discipline of International Law', EJIL Vol. 25 no. 2 (2014), p 370. See also G. McDonell, "Risk management, reality and the precautionary principle: Coping with decisions" in Harding and Fisher (n 2), p 192, noting that normally people consider the 'model' of science to be "the physical and natural sciences" that rests on criteria such as experimentation, theory falsification and predictability.
[146] See footnote 22.
[147] London Declaration paras. VII and XVI.
[148] See Cameron (n 17), pp 31-33.
[149] Cooney (n 12), p 230. See also J. Peel, *Science and Risk Regulation in International Law* (CUP, 2010), p 150, noting that the PP as developed in international law is 'rarely divorced' from conventional science; and R. Thaman, P. Lyver, R. Mpande, E. Perez, J. Cariño and K. Takeuchi (eds), *The Contribution of Indigenous and Local Knowledge Systems to IPBES: Building Synergies with Science* IPBES Expert Meeting Report (2013), UNESCO, p 56, noting that the "term 'science' is often used in too narrow a sense, excluding the social and human sciences", among others.

activities like exploitation of natural resources,[150] with associated risks and uncertainties that are beyond this narrow understanding but still may have environmental implications. For instance, Cooney highlights that the potential risks represented by the overexploitation of a timber species requires the consideration of uncertainties and threats that are not exclusively of an environmental nature like biological factors (e.g., status of the tree species) or the consequences for biodiversity and ecosystems' functions (e.g., impact of logging on the local forest fauna) but also socio-economic uncertainties like the motivations behind the overexploitation of the resource (e.g., poverty, market forces).[151] Interestingly, often socio-economic considerations are considered in the adoption of precautionary action (and are even explicitly mentioned in some PP formulations); what seems to be absent though are references to cultural uncertainties and elements, especially relevant in the case of Indigenous peoples (who are very often affected by these type of activities),[152] because of the possible effects on their traditional and sustainable way of life, as I will analyse in more depth later on.[153] What I want to highlight now is that a narrow understanding of 'science' and 'scientific uncertainty' is insufficient to adequately identify potential threats and uncertainties that are not 'strictly scientific' but could nevertheless cause environmental harm, or even seriously impact humans. I will come back to this point in section 4.3.

4. The Precautionary Principle in action

In the presence of the three elements (threat or risk to the environment, serious or irreversible damage and scientific uncertainty) the PP is triggered, and therefore there is an obligation to take precautionary action. Yet, as per its flexible nature, the

[150] I. Wills, "The Environment, Information and the Precautionary Principle", Agenda, Vol 4 No 1 (1997), p 7.
[151] Cooney (n 12), pp 229-230. See also T. Balangue, "The Precautionary Approach and Local Livelihoods: A Study of a Protected Landscape and Seascape in the Philippines" pp 241-247 in Cooney and Dickson (n 22), p 247, noting that the complex interrelationships of a forest ecosystem are not fully understood nor measurable by science and technology.
[152] See V. Tauli-Corpuz, "Report of the Special Rapporteur on the rights of Indigenous Peoples", A/HRC/36/46 (1 November 2017), para. 6.
[153] See Chapter III, sections 2-5.

PP does not impose any particular measures[154] leaving some margin to decide which course of action to take,[155] considering the particular risks that need to be abated. Three important issues are discussed in this section: first, that whatever the measure/action taken, it has to be effective and proportionate;[156] second, the debate about the alleged reversal of the burden of proof; finally, the role of non-environmental considerations in the adoption of precautionary measures.

4.1 Effectiveness and proportionality

Effectiveness is the most fundamental prerequisite for a measure to be considered precautionary; otherwise the PP would be meaningless.[157] This means that it needs to be able to avoid the serious/irreversible harm and also that in doing so it cannot be more harmful to the environment than the threat intended to avoid;[158] in addition, it should be undertaken as early as possible.[159]

Proportionality refers to the need to have an appropriate relation between the degree of risk and the response;[160] thus, the more significant or serious the damage expected (and the greater the degree of uncertainty)[161] the more rigorous measures must be,[162] so catastrophic events may require special efforts even if they are very unlikely.[163]

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[154] Wiener describes this as "uncertainty does not justify inaction" that "does not answer the real question, which is what action to take in the face of (inevitable) uncertainty" Wiener (n 21), pp 604-605.
[155] See section 2.3 above.
[156] Trouwborst (n 10), p 147; De Sadeleer (n 7), p 132.
[157] Trouwborst (n 10), p 147-148.
[158] "The PP should not call for precautionary regulation of uncertain irreversible risks if such regulation would itself yield the very dangers the PP seeks to avoid. At the extreme, the PP could swallow itself, prohibiting both the risky activity and the risky regulation of this activity." Wiener (n 21), p 609.
[159] Trouwborst (n 10), p 182; De Sadeleer (n 7), p 91.
[160] R. Cooney, "The Precautionary Principle in Biodiversity Conservation and Natural Resource Management: An issues paper for policy-makers, researchers and practitioners" IUCN Policy and Global Change Series No. 2, 2004, p 36; De Sadeleer (n 7), p 168.
[161] M. Kamminga, "The Precautionary Approach in International Human Rights Law: How It can Benefit the Environment" in D. Freestone and E. Hey (eds), *The Precautionary Principle and International Law: The Challenge of Implementation* (Kluwer, 1996), p 185.
[162] Trouwborst (n 10), p 150; De Sadeleer (n 7), p 155 and p 168; von Schomberg (n 98), p 37; A. Nollkaemper, "'What you risk reveals what you value', and Other Dilemmas Encountered in the Legal Assaults on Risks" in Freestone and Hey (n 158), pp 82-84.
[163] Wiener (n 21), p 608. This is why there is a 'planetary defense coordination office' in charge of the early detection of potentially hazardous objects (asteroids and comets) with predicted orbits close to the Earth. See https://www.nasa.gov/planetarydefense

What are effective and proportional measures depend on the context and the kind of harm that needs to be abated: typical precautionary measures include bans, use of best technology available, EIAs[164] and consultations,[165] among others,[166] but any measure can be a precautionary measure.[167]

4.2 The issue of the burden of proof

Traditionally, environmental requirements are established only after the authorities have proven the need to regulate or forbid a certain activity.[168] The application of the PP implies a change in this approach: since lack of full scientific certainty is not an excuse for not taking measures, an action (standard, ban, moratorium, etc) adopted by a State to prevent serious harm or a risky activity does not require the absolute establishment of a cause-effect relation, as before. In other words, a State would have the possibility to take measures before having absolute proof of harm,[169] reinforcing the anticipatory nature of the PP; for instance, a ban on genetically modified organisms would be justified even though its adverse effects are not, to date, fully demonstrated. Cameron argues that this sort of reversal of the burden of proof is accepted in international law[170] but then mentions a possible second reversal, consisting on shifting the burden to the proponent of a potentially risky activity, who will have to convince the regulator that the activity is harmless.[171] An example of

[164] Biddulph and Newman (n 60), p 306; Pulp Mills, Separate Opinion of Judge Cançado Trindade, para. 96; Trouwborst (n 10), pp 174-175.
[165] See for instance G. Handl, "Environmental Security and Global Change: The Challenge to International Law" 1 Y.B.INT'LENVTL.L.3, 29(1990), p 21; J. Brunnee, "A Conceptual Framework for an International Forests Convention: Customary Law and Emerging Principles" in Canadian Council on International Law (eds), *Global Forests and International Environmental Law* (London 1996), p 73; L. Starke, "Breaking new ground: Mining, minerals, and sustainable development." London: Earthscan (2002), p 158; and Trouwborst (n 10), p 177, among others.
[166] See for instance Trouwborst (n 10), Chapter 7 "Precautionary measures"; D. Freestone and E. Hey, "Origins and development of the Precautionary Principle" in Freestone and Hey (n 158), p 13; and Cameron (n 17), among others.
[167] Trouwborst (n 10), p 179.
[168] De Sadeleer (n 7), p 202; Mead (n 1), p 155; Pyhälä et al (n 21), p 213.
[169] Birnie et al (n 9) p 163.
[170] Cameron (n 17), p 46. See also Birnie et al (n 9) p 158 and Foster (n 141), p 245.
[171] Cameron (n 17), p 46-47. See also De Sadeleer (n 7), p 202-203.

activities forbidden until proven harmless would be the ban on industrial waste dumping at sea and the whaling moratorium.[172]

If we consider the PP as a change of paradigm (from the polluter benefitting from scientific doubt to having uncertainty work to the benefit of the environment),[173] shifting the burden of proof seems a logical effect.[174] After all, the proponent of an activity is seeking to change the *status quo* to a potentially more-polluted state, so it makes sense for him/her to prove the relative (i.e., not absolute) harmlessness of the activity[175] and not waiting until there is harm to change course.[176] Also, this proponent has been planning and preparing for some time, having more information about impacts and a general view of a project,[177] being in a better position than the people opposing it[178] when it comes to providing evidence (and reduce uncertainties). Thus, this reversal would be a natural result of the PP. However, this is controversial and there are good arguments against it; for instance, most formulations of the PP do not mention this alleged reversal, so it does not seem to be a normal or widely accepted consequence of the PP,[179] and there is no sufficient international practice to support it, as the Pulp Mills case shows.[180] Moreover, it would impose a near-impossible standard to meet, as it is logically very difficult to conclusively establish that a certain activity is absolutely harmless or that it will not

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[172] Birnie et al (n 9) p 159; yet, they mention that this is exceptional and it was deliberately not subsequently adopted in further implementations of the PP; also Wiener (n 21), p 606.

[173] De Sadeleer (n 7), p 203; see also D. Freestone and E. Hey, "Implementing the PP: Challenges and Opportunities" in Freestone and Hey (n 158), p 259.

[174] Trouwborst (n 10), p 225. See also J. McDonald, "Tr(e)adding cautiously: precaution in WTO decision-making" in Fisher et al (n 9), p 162: "placing the burden of proving safety to the proponent will generally serve precaution better than locating it in those seeking to prevent harm"; Kravchenko et al (n 126), p 47.

[175] Cameron (n 17), p 47.

[176] L. Emerton, M. Grieg-Gran, M. Kallesoe and J. MacGregor, "Economics, the PP and Natural Resource Management: Key Issues, Tools and Practices" in Cooney and Dickson (n 22), p 254.

[177] Trouwborst (n 10) p 198; A. Cançado Trindade "Principle 15: Precaution" in Viñuales (n 27), p 409; see also Dissenting Opinion of Judge Weeramantry in Nuclear Test case, p 343 noting that "New Zealand has placed materials before the Court to the best of its ability, but France is in possession of the actual information."

[178] Often vulnerable people directly affected but without the means to discharge this burden of proving with certainty the potential harm. Moyle (n 22), p 164.

[179] J. Jones and S. Bronitt, "The burden and standard of proof in environmental regulation: the precautionary principle in an Australian administrative context" in Fisher et al (n 9), p 137, and J. Tickner and D. Kriebel, "The role of science and precaution in environmental and public health policy" in ibid, p 70.

[180] Pulp Mills, para. 164: "the Court considers that while a precautionary approach may be relevant in the interpretation and application of the provisions of the Statute, it does not follow that it operates as a reversal of the burden of proof." See also Trouwborst (n 10), p 226 and Foster (n 141), p 274.

become a future source of harm when there is incomplete knowledge of possible adverse effects;[181] every activity has associated risks, so this standard would effectively halt progress.[182] Finally, an automatic reversal may affect vulnerable or poor communities, including Indigenous peoples, because they engage in local use of natural resources (e.g., customary practices) that some may consider as a threat to the environment, placing an overwhelming burden on them that they would hardly meet.[183]

Naturally, a zero-risk proof is unachievable, but this is not the standard required by any formulation of the PP;[184] as noted above, what is usually required is to prove that serious/irreversible harm is not going to result from the proposed activity in the presence of scientific uncertainty,[185] so the discussion is more about *what* needs to be proven and not so much about *who* needs to prove it. In other words, the PP lowers the standard of proof,[186] so the opponent of a pollutant activity has to only demonstrate in the initial allegation that, based on the available scientific evidence, there are 'reasonable grounds for concern' that non-negligible damage may be caused to the environment,[187] instead of needing to prove beyond reasonable doubt an alleged environmental damage. If this standard is met, the procedure continues its normal course, being the turn of the potential polluter to disprove the allegations[188] and if unsuccessful, the decision-maker has to adopt effective and

[181] Sunstein (n 59), p 1023, also noting that often the options available entail some degree of risk; and Morris, arguing that the standard of proof would become infinitely high. J. Morris "Defining the Precautionary Principle", pp 8-9 in J. Morris (ed) *Rethinking Risk and the Precautionary Principle* (Butterworth-Heinemann, 2000); Tickner and Kriebel (n 164), pp 70-71.
[182] Sunstein (n 59), p 1023.
[183] Cooney (n 12), pp 234, noting that asking Indigenous communities "to demonstrate that their use of non-wood forest products, sea turtle eggs or pasture was not causing any harm would be tantamount to ending" their traditional livelihoods; and Cooney (n 157), p 37.
[184] Trouwborst (n 10), pp 200-201 and 225; De Sadeleer (n 7), p 207, noting that there is no obligation of harmlessness.
[185] Trouwborst (n 10) p 226; Foster (n 141), p 255; Cooney (n 157), p 8.
[186] See S. Maguire and J. Ellis, "Redistributing the Burden of Scientific Uncertainty: Implications of the Precautionary Principle for State and Nonstate Actors", Global Governance 11 (2005), p 505; Trouwborst (n 10), p 227; and Jones and Bronitt (n 176), pp 138-139.
[187] Trouwborst (n 10), p 224; Foster (n 141), p 255; J. Whitehouse, "Will the precautionary principle affect environmental decision-making and impact assessment?" in Harding and Fisher (n 2), p 66 citing Walton who notes that when the PP applies, the authority should be able to reject a development proposal based on 'reasonable belief' of harm to human health and environmental capital or irreversible harm to natural assets.
[188] Jones and Bronitt (n 176), pp 141-142.

proportionate precautionary measures to avoid the materialization of the harm, since it must assume it will materialise.[189]

Logically, if a party is guided by the PP and another party challenges this, the former would just need to meet the 'reasonable ground for concern' standard,[190] to prevent a loophole. This is important for situations in which Indigenous peoples' way of life may allegedly cause environmental harm,[191] as they tend to live in a sustainable way,[192] avoiding unnecessary harm to their environment.[193]

To summarise, the PP does not seem to automatically reverse the burden of proof, an effect not sufficiently supported by international law; it does however lower the standard of proof, favouring the consideration of arguments to err on the side of caution and avoid potentially unacceptable harm.

4.3 Non-environmental considerations

The main purpose of the PP is the protection of the environment from potentially serious/irreversible threats in the presence of scientific uncertainty. In theory, this means that once the PP is triggered, the only thing that would matter is to avoid environmental damage, however uncertain, so non-environmental concerns would be irrelevant as long as the precautionary measure is effective. This is because, as noted by the European Environmental Agency, for too long decision-makers have ignored situations where there were reasonable grounds for concern about non-negligible environmental harm, which materialised "because of short-term economic and political interactions",[194] placing other considerations in front of environmental

[189] Trouwborst (n 10), p 224. See also D. Farrier, "Factoring biodiversity conservation into decision-making processes: The role of the precautionary principle" in Harding and Fisher (n 2), p 108.
[190] Trouwborst (n 10), p 224.
[191] For instance, Kenya defended the eviction of the Endorois from their ancestral lands for conservation purposes, argument rejected by the African Commission, ruling that "the Endorois-as the ancestral guardians of that land-are best equipped to maintain its delicate ecosystems". African Commission on Human and Peoples' Rights, "Centre for Minority Rights Development (Kenya) and Minority Rights Group (on behalf of Endorois Welfare Council)/Kenya" Decision of November 25, 2009, paras. 3, 173 and 235, among others.
[192] See Chapter III, sections 3-5.
[193] See for instance, Saramaka case, para. 144, testimony of a Saramaka person saying that "[w]hen we cut trees, we think about our children, and our grandchildren, and future generations(…) We are very careful not to destroy anything that is in the forest".
[194] Late lessons from early warnings (n 131), p 168, citing the cases of asbestos and polychlorinated biphenyls (PCBs), among others. See also Nollkaemper (n 159), p 73; and N. Myers, "Debating the

protection; thus, the PP would rectify this by "adjusting the balance in favour of the environment".[195] Therefore, socio-economic arguments like how much money would be needed or potential job losses would not be able to be invoked to abstain/excuse from the obligation to prevent harm,[196] and there would seem to be no role for economic tools like cost-benefit analysis ('CBA'). This tool analyse possible impacts and benefits, estimates its likelihood and translate them into monetary value, in order to compare the pros and cons of certain alternatives, taking action only if "the likely benefits exceed the likely costs".[197] In this context, CBAs are unable to "quantify the unquantifiable", [198] i.e., adequately capture the value of the animals, plants, ecosystems and their interrelations[199] or provide an effective and reliable way to compare different options in situations of irreversibility or uncertainty. Trouwborst also mentions that it is practically impossible to assign an accurate economic value to undiscovered properties or uses of known species, much less unknown ones,[200] and that the cost of the irreversible harms (such as a species' extinction) is infinite by definition.[201] Even if there is a way to assign 'right' or 'fair' economic values, it can be argued that it would still be more convenient to rely on the PP, as precautionary measures are usually cost-effective, being cheaper to avoid harm than to mitigate it.[202] For example, it is more cost-effective to preserve mangroves than to allow mangrove loss and then invest on restoration or rehabilitation;[203] and maintaining and restoring wetlands is more cost-effective and sustainable than relying on alternative

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Precautionary Principle". Science and Environmental Health Network (2000), p 6, stating that cost-considerations have stopped regulatory action in the past.

[195] Trouwborst (n 10), p 236.

[196] Nollkaemper (n 159), p 76; Trouwborst (n 10), p 278; De Sadeleer (n 7), p 170; also, costs can easily be manipulated, exaggerating the benefits and underestimating environmental costs. Myers (n 191), p 5.

[197] C. Sustein, "Cost-Benefit Analysis and the Environment", Ethics 11 (January 2005), pp 351-353.

[198] De Sadeleer (n 7), p 199.

[199] Trouwborst (n 10), pp 249-250, noting how CBAs do not do justice to the cost of environmental degradation; Emerton et al (n 173), pp 261 and 265; and F. Ackerman, "Critique of Cost-Benefit Analysis, and Alternative Approaches to Decision-Making A report to Friends of the Earth England, Wales and Northern Ireland" (January 2008) pp 3-5.

[200] Trouwborst (n 10), pp 250-251; see also De Sadeleer (n 7), pp 167 and 170; Ackerman (n 184), pp 5-6.

[201] Trouwborst (n 10), p 247.

[202] Emerton et al (n 173), p 255; Trouwborst (n 10), p 246.

[203] Also considering that mangroves protects against floods and storms, among other benefits. See A. McIvor, F. Tonneijck, S. Tol and P. van Eijk, "Mangroves for coastal defence". Guidelines for coastal managers & policy makers (Wetlands International and The Nature Conservancy, 2014), p 33.

man-made infrastructures.[204] Similarly, several examples show how establishing a precautionary measure like a ban or capture limits, could avoid the collapse of a whole industry and the subsequent impacts in terms of direct and indirect jobs and other social effects.[205]

However, in practice the circumstances that trigger the PP vary in each case, making it hard for decision-makers to dismiss these socio-economic factors;[206] in addition, the PP does not impose a specific precautionary measure but leaves some discretion to choose one (or more) among a range of effective and proportional options, from which the decision-maker must select the most appropriate, having some space to balance different interests, including socio-economic ones.[207] In this context, the application of the PP will be "tempered by reference to a range of economic and political factors which will potentially compete for priority with the concept of precaution."[208] This is something that some formulations of the PP actually acknowledge; for instance, Principle 15 of the Rio Declaration refers to "cost-effective measures to prevent environmental degradation", as well as the UNFCCC, which also adds that precautionary measures "should take into account different socio-economic contexts", be comprehensive and comprise all economic sectors, among others;[209] and the 1995 Fish Stock Agreement states than in implementing the PP, "environmental and socio-economic conditions" need to be taken into account.[210] Thus, as long as the action adopted is effective in avoiding

[204] Also considering the different services that wetlands provide, like filtering water and erosion control. D. Rusii, P. ten Brink, A. Farmer, T. Badura, D. Coates, J. Förster, R. Kumar and N. Davidson, "The Economics of Ecosystems and Biodiversity for Water and Wetlands" (IEEP, 2013), pp 5 and 48.
[205] Trouwborst (n 10), pp 238-239; Late lessons from early warnings (n 131), in particular pp 17-26, mentioning the socio-economic costs of the collapse of the Newfoundland cod fisheries, among others; see also European Environment Agency, "Late lessons from early warnings: science, precaution, innovation" (2013).
[206] Cooney (n 12), pp 234-235, saying that the effective implementation of the PP seems to demand an integrated policy and management framework that addresses environmental, social and economic dynamics.
[207] Cooney (n 157), p 36, noting how decision-makers consider the uncertainty surrounding threats, the seriousness and possible likelihood of threats, the likely economic, social (and environmental) costs of the protective action, the environmental, economic and social benefits of the action, and the level of security that is desired.
[208] M. Feintuck, "Precautionary Maybe, but What's the Principle? The Precautionary Principle, the Regulation of Risk, and the Public Domain" Journal of Law and Society, Vol. 32, No. 3 (2005), p 377.
[209] UNFCCC, Article 3.3.
[210] 1995 Straddling Fish Stock Agreement, Article 6.3 (c).

environmental harm, there is some space for the consideration of socio-economic elements.[211]

4.3.1 Cultural considerations and Indigenous peoples

Considering the above, it is interesting to note the absence of explicit references to cultural considerations, particularly relevant when it comes to potential threats of serious/irreversible harm from activities that take place in Indigenous peoples' lands, as it is often the case.[212] In effect, as mentioned in the analysis of 'scientific uncertainty', human activities like mining or logging generate risks and uncertainties that go beyond natural sciences, into human-environmental dynamics. In the case of Indigenous peoples, it is necessary to take into account that the basis of their traditional way of life is their special relationship with their lands; thus, the risks generated by projects and developments on their territories involve important cultural aspects, including the use and development of their traditional knowledge, and practices such as the protection of certain species that have spiritual significance and the establishment and maintenance of sacred places.[213] In addition, their practices have resulted in the careful and sustainable use of natural resources,[214] with Indigenous peoples having "a vital role in environmental management and development", as mentioned by the Rio Declaration.[215] This means that overlooking these cultural considerations may result in serious environmental harm[216] but, more importantly for this research, also in serious effects on Indigenous peoples' traditional way of life. For instance, the declaration of the Surin Islands as a national park in Thailand has been instrumental in their protection, but it also resulted in access restrictions to materials for boatbuilding and serious limitations on the

[211] Trouwborst (n 10), p 279.
[212] See *supra* 152.
[213] See Chapter III, sections 3-5.
[214] Ibid., sections 2-3.
[215] Rio Declaration, Principle 22.
[216] See for instance, D. Smyth, "Indigenous land and sea management–a case study" (Canberra: DSEWPaC, 2011), p 11, mentioning that there was an increase in wildfires in Australia following the removal of Indigenous peoples from certain areas; A. Ross, K. Pickering Sherman, J. Snodgrass, H. Delcore and R. Sherman, *Indigenous Peoples and the Collaborative Stewardship of Nature: Knowledge Binds and Institutional Conflicts* (Left Coast Press, 2011), pp149-153, noting how the management of lands and resources by the US government in former and current Lakota lands disregarding the latter's practices has resulted in ecological degradation and extinction.

nomadic way of life of the Moken who live in the area, affecting their traditional knowledge and practices on construction, foraging (including the customary rotating use of resources to prevent overuse and degradation) and navigation; in addition, the government's support for eco-tourism activities added more pressure on their livelihoods. These factors forced them into a more sedentary way of life, seriously affecting their traditional livelihood, practices and cultural identity, and also resulting in a more intense use of resources in smaller areas, against their traditions, negatively impacting their environment.[217] A similar situation, described in the previous chapter, happened to the Gonds in India and the imposition of a management plan on their lands.[218]

As noted above, to address this is necessary to expand the notion of 'science' and 'scientific uncertainty', which as mentioned in section 3.2, is shaped by a narrow approach, "largely inadequate for addressing the vast cultural and natural diversity which must be considered" to deal with complex natural relationships and multi-dimensional threats.[219] This requires embracing "broader forms of knowledge that extend beyond science, narrowly conceived"[220] which, following the standard established for the element of 'scientific uncertainty', cannot constitute 'mere beliefs' or simple intuitions, as they would be insufficient to trigger the PP. In this context, whenever Indigenous peoples may be affected, the 'broader form of knowledge' required to be integrated is traditional knowledge, for various reasons: first, as I argue in more depth on the next chapter, this knowledge has a scientific character; second, it constitutes the 'best information available' regarding possible effects on their traditional way of life, including those of a cultural and spiritual nature, often difficult to identify with certainty without Indigenous peoples' input;[221] and third, this knowledge has proven more accurate than conventional science or methods in situations of scientific controversy. For instance, Johannes et al recount

[217] N. Arunotai, "Moken traditional knowledge: an unrecognised form of natural resources management and conservation" International Social Science Journal 58(187),(2006).
[218] See Chapter I, section 1.
[219] Thaman et al (n 146), p 56. See section 4.2.
[220] Peel (n 146), p 336. See also S. Jasanoff and M. Martello, "Conclusion: Knowledge and Governance" in S. Jasanoff and M. Martello (eds), *Earthly politics: local and Global in Environmental Governance* (MIT Press, 2004), pp 335-6; and E. Fisher and R. Harding, "The precautionary principle: Towards a deliberative, transdisciplinary problem-solving process" in Harding and Fisher (n 2), p 295.
[221] See Chapter III, sections 3-5.

the situation of traditional fishermen in the Solomon Islands who, based on their observations, maintained that the overfishing of small fish used for commercial bait was significantly decreasing the number of certain predatory fish necessary for their subsistence. Australian marine biologists hired by the government wrongly (as refuted by later studies) concluded that the bait fishery had a minimum impact on predatory fish, because the data was gathered without considering the seasonal or nocturnal nature of fishing activities in the region, among other elements.[222] Another case is recounted by Ross et al, where the Australian government implemented a program to monitor the numbers of dugong (an endangered species), by which any decline triggered precautionary restrictions on commercial and Indigenous hunting (being the latter unfairly considered as a main factor of their declining numbers, disregarding evidence of their sustainable hunting practices based on strict social and cultural safeguards). In 2001, scientific aerial surveys suggested that such decline was happening, until traditional hunters, voluntarily sharing their knowledge and experience, informed the crew about the inadequacy of both the survey method (the noise scared the dugongs) and the location of the study (the dugongs were on different seasonal feeding grounds), which was later corroborated in subsequent studies.[223] Although this latter example could be construed as an example of 'erring on the side of caution', which is what the PP is about, it could have resulted in the imposition of unacceptable restrictions on Indigenous peoples' sustainable practices, based on unreliable data collection methods,[224] potentially forcing them to abandon their traditional practices, severely affecting their way of life.

However, there have been occasions where scientific controversies between traditional knowledge and conventional sciences have resulted in the disregard of the former.[225] For instance, Nadasdy mentions the case where in the context of managing Dall sheep population in Yukon territory, Kluane First Nation members expressed

[222] R. Johannes, M. Freeman and R. Hamilton, "Ignore fishers' knowledge and miss the boat", Fish and Fishries vol 1 issue 3 (2000), pp 258-260.
[223] Ross et al (n 200), pp 120-129.
[224] Ibid., pp 127-129.
[225] Or even as 'obsolete or merely anecdotical'. N. Chalmers and C. Fabricius, 'Expert and generalist local knowledge about land-cover change on South Africa's wild coast: Can local ecological knowledge add value to science?' Ecology and Society 12:10(2007), p 11; M. Stevenson, "The Possibility of Difference: Rethinking Co-management", Human Organization, Vol. 65, No. 2 (2006), p 170; Ross et al (n 205), p 95; S. Mackinson, "Integrating Local and Scientific Knowledge: An Example in Fisheries Science", Environmental Management 27, p 542.

their concerns to scientists and resource managers about allowing hunters only to shoot full mature rams, due to their importance for the sheep population of their role as teachers (in aspects like mating and survival strategies), recounting that one person "specifically likened to killing off all the elders in the community"; nevertheless, these concerns were ignored by biologists, some of who did not take this 'social' information seriously.[226]

If this traditional knowledge is scientific in nature (and I argue in the next chapter that it is), incorporating it into the notion of 'scientific uncertainty' in situations where Indigenous peoples may be affected would contribute to the avoidance of potentially serious environmental harm, based on their sustainable practices and understanding of the environment. More importantly, and closer to the point of this research, it would mean that this traditional knowledge is recognised as a scientific basis to adopt precautionary action, which implies that other types of potential threats of non-negligible harm identified by relying on this knowledge, especially those that threaten Indigenous peoples' rights, would be subject to precautionary treatment,[227] broadening the scope of the PP (which as noted above is a flexible notion that constantly incorporate new information to deal with ever-changing threats), and enabling its application to avoid the materialisation of these threats. This is due to the fact that, as this scientific traditional knowledge constitutes the 'best information available' regarding Indigenous peoples' traditional livelihood (see next chapter), it provides credible scientific evidence (i.e., 'reasonable grounds for concern') about possible significant effects on their way of life from a determined measure taking place on their territories, something particularly relevant when it comes to cultural and spiritual aspects. In this sense, there would be a 'threat', of a 'serious' nature, in the presence of 'scientific uncertainty', which triggers the PP.

Interestingly, there are other instances of the PP being applied to protect Indigenous peoples' rights. For example, the IACtHR has emphasized States' obligation to ensure the rights to life and personal integrity, acting "diligently to prevent harm to these rights"; in order to do so, they "must act in keeping with the

[226] P. Nadasdy, "The Politics of Tek: Power and the "Integration" of Knowledge", Arctic Anthropology, Vol. 36, No. 1/2 (1999) pp 7-8.
[227] See also Kamminga, (n 161), p 185 noting there is no inherent reason why violations of Indigenous peoples' rights should not be subject to this precautionary treatment.

precautionary principle" in the face of potentially serious environmental threats, and adopt effective precautionary action.[228] These actions include the regulation of activities that could cause serious environmental damage,[229] conduct EIAs when there are risks of significant environmental harm[230] and mitigate environmental effects, using the best information available, even if the source of the pollution is unknown.[231] In the case of Indigenous peoples, and in attention to the fact that these rights to life and personal integrity include their fundamental right to cultural identity, based on the special relationship that they have with their lands,[232] the Court has ruled that States also have to consult them and conduct social impact assessments (in addition to EIAs) with Indigenous participation.[233] This allows them to incorporate their knowledge in decision-making, in order to anticipate potentially serious harm for Indigenous communities, protecting their deep connection with their territories, their cultural identity and values and traditional practices,[234] and ensure that they are aware of all possible risks that could affect them.[235]

In addition, as I will mention in Chapter III in more detail, in the context of the biodiversity regime there are the Akwe:Kon voluntary guidelines for cultural, social and environmental impact assessments.[236] These guidelines have the objective to, *inter alia*, avoid "potential adverse impacts on the livelihood" of Indigenous peoples[237] through the implementation of different types of impact assessments with Indigenous participation, enabling them to integrate their knowledge, concerns and interest in this process. These various impact assessments are guided by the PP,[238] and are aimed to identify and help to avoid possible impacts on the environment (EIAs), but also on: Indigenous peoples' way of life, values, belief systems,

[228] IACtHR Advisory Opinion, para. 180.
[229] Ibid., para. 149.
[230] Ibid., para. 169.
[231] Ibid., para. 172.
[232] Ibid., paras. 113 and 169; Saramaka case, paras. 121-122. See also Chapters III, IV and V.
[233] Saramaka case, paras. 129 and 133; IACtHR Advisory Opinion, para. 169. See Chapter V, section 3.1.2.
[234] IACtHR Advisory Opinion, para. 169; Chapter V, section 3.1.
[235] Saramaka case, para. 133; IACtHR Advisory Opinion, paras. 164 and 169.
[236] Secretariat of the Convention on Biological Diversity, "Akwe: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessments regarding Developments proposed to take place on, or which are likely to impact on, Sacred Sites and on Lands and Waters Traditionally occupied or used by Indigenous and Local Communities" (CBD Guideline Series, 2004).
[237] Ibid., foreword.
[238] Ibid, para. 61.

relationship with the local environment and particular species and customs, among others (cultural impact assessments); the physical manifestations of a community's cultural heritage, including sites and remains of historical, religious, spiritual and cultural values (cultural heritage impact assessments); and the well-being and quality of life of a community (social impact assessments).[239]

This shows that this flexible principle is able to be extended beyond environmental aspects, avoiding in these cases the materialisation of potential impacts on Indigenous peoples' traditional way of life, by relying on their traditional knowledge, concerns and interests, protecting their rights.[240]

Finally, as mentioned by Boisson de Chazournes, the existence of uncertainties that derive from human activities requires an effective application of public participation,[241] in line with Principle 10 of the Rio Declaration, which establishes that "[e]nvironmental issues are best handled with participation of all concerned citizens(…)" and that "each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes."[242] Similarly, Cançado Trindade notes that the PP entails an obligation to notify, share information and consult local populations.[243] This means that the integration of new sources of knowledge into the notion of scientific uncertainty has to be done through public participation mechanisms,[244] which, as outlined above, in the case of Indigenous peoples refers to consultations and impact assessments, according to several international instruments and jurisprudence. I will come back to this point in the following chapters.

[239] Ibid. para. 6.
[240] The analysis of the effects of this 'wider' PP in the protection of Indigenous peoples' rights is in Chapter VI, section 2.
[241] L. Boisson de Chazournes, "New Technologies, the Precautionary Principle, and Public Participation" in T. Murphy (ed), *New Technologies and Human Rights* (OUP, 2009), pp 179-180.
[242] Rio Declaration, Principle 10.
[243] Cançado Trindade (n 20), pp 424-5; see also Pulp Mills, Separate Opinion of Judge Cançado Trindade, para. 156.
[244] Peel (n 146), p 336.

5. Concluding Remarks

The PP is, and will likely remain, a controversial principle in international law, despite its inclusion in a wide range of areas (biodiversity, climate change, etc); however, it plays a critical role regarding the protection of the environment, allowing for the adoption of early measures to anticipate harm even if there is no full scientific certainty about the potential threat. In clarifying some of the controversies surrounding the PP, I first noted that, as a principle developed and applied mostly in IEL, the PP needs to remain as a flexible notion, because the environmental threats and risks are constantly evolving, which is also why this field relies on broad concepts and framework conventions. I then mentioned that, following the position held by several authors, the PP is a general principle of international law, guiding and influencing States conduct in every situation where there are threats of serious/irreversible environmental damage in a context of scientific uncertainty. This includes for example the introduction of new technologies or substances which effects are not completely clear, and situations where the threats come from human activities such as the exploitation of natural resources in Indigenous peoples' lands. I then moved on to analyse the elements of the PP (threat, of a serious/irreversible nature and scientific uncertainty), in which presence the PP is triggered, and precautionary action must be taken to avoid the materialisation of non-negligible environmental harm, action that must be effective and proportionate. However, the PP does not reverse the burden of proof, as sometimes argued, but lowers the standard of proof (what needs to be proven), allowing the opponent of a potentially pollutant action to just prove that, with the best scientific information available, there are reasonable grounds for concern that serious or irreversible harm is going to occur; following the regular procedure, it is then the potential polluter who has to disprove these allegations.

The element of scientific uncertainty is shaped by a narrow understanding of 'science' based on natural sciences, adequate to address risks arising from the introduction of substances which could interact with the environment in ways that are not well understood (the original task of the PP), but not when it comes to the existence of threats and uncertainties arising from other human activities like mining

or logging, that involve dynamics beyond the ecological or biological aspects. The implication is that a narrow approach could result in ineffective precautionary action, causing both environmental harm and impacts on humans, as not all the elements necessary to decide the best course of action (the 'best information available') would have been considered.

This narrow approach is somewhat attenuated by the inclusion of socio-economic considerations in precautionary decision-making (as noted in some formulations of the PP); however, there is a notable absence, cultural considerations, which are sometimes equally or more relevant, especially in situations where Indigenous peoples may be affected, due to their special relationship with their lands and environment, the base of their traditional way of life. In this context, it is necessary to broaden this notion of 'scientific uncertainty', integrating this narrow approach to science with other sources of knowledge that do not correspond to the 'ideal model of science' through public participation mechanisms, providing a different and complementary view of what constitutes scientific uncertainty and risks and better foundation for the adoption of effective and proportionate precautionary measures. In the context of Indigenous peoples, this 'other source of knowledge' would be traditional knowledge, if it is recognised as having a scientific character. This would not only result in the avoidance of possible environmental harm, considering Indigenous peoples' sustainable practices, but it would enable the implementation of this principle in the protection of their rights when there are threats of serious or irreversible harm to their traditional way of life.

Following this, I will analyse in the next chapter the issue of traditional knowledge, including the question about its scientific character.

Chapter III: Indigenous Peoples' Traditional Knowledge

1. Introduction

It is widely recognised that Indigenous peoples have a special relationship with their lands in a way that includes deep religious, cultural, social and environmental bonds which constitute the basis of their collective traditional way of life.[1] This relationship has resulted in the development of a body of 'traditional knowledge' ('TK') that has enabled their survival through long periods of time[2] and has led to the conservation

[1] See International Labour Organization, Indigenous and Tribal Peoples Convention, C169, 27 June 1989, entered into force 5 September 1991 ('C169'), Article 13; UN General Assembly, UN Declaration on the Rights of Indigenous Peoples: resolution adopted by the General Assembly, 2 October 2007, A/RES/61/295 ('UNDRIP'), preamble and Articles 11-12 and 24-26, among others; S. Venne, "The New Language of Assimilation" in Without Prejudice Vol. II No 2, 1989; J. Anaya, *Indigenous Peoples in International Law* (2nd ed. 2004); F. Berkes, *Sacred Ecology* (3rd edition, Routledge 2012), and K. Engle, *The Elusive Promise of Indigenous Development*: *Rights, Culture, Strategy* (Duke University Press, 2010).

[2] F. Mamani, "Saberes y conocimientos del pueblo indigena del ayllu Sullka del municipio de Tomave, Potosi, Bolivia" in B. Baptiste, D. Pacheco, M. Carneiro and S. Diaz, *Knowing our Lands and Resources: Indigenous and Local Knowledge of Biodiversity and Ecosystem Services in the Americas* (UNESCO 2017), p 97 noting that their collective way of life guarantees their survival; and D. Shelton "Principle 22: Indigenous People and Sustainable Development" in J. Viñuales (ed), *The Rio Declaration on Environment and Development*: *A Commentary* (OUP, 2015), p 542, noting that the intimate knowledge of their environment sustain a self-sufficient lifestyle over the long term.

of biodiversity.[3] It also reflects an Indigenous understanding of 'belonging to the Earth' where nature is "an extension of society",[4] as opposed to a western worldview that differentiates between the environment and other spheres of life (scientific, political, religious, etc).[5] This cosmovision means that what may be considered an 'environmental issue' from an international law perspective is not perceived in the same way by Indigenous peoples, who could have their whole livelihood and even their very survival seriously affected; they are "a special case where human rights and the environment intersect".[6]

As outlined in Chapter II, Indigenous peoples' TK could be useful in situations of potentially non-negligible threats to their livelihood, providing a different understanding of possible risks and scientific uncertainties, not based on 'conventional science'; yet this is only possible if TK constitutes more than 'mere beliefs' or 'simple intuition'. Thus, it is necessary to analyse what is understood by 'traditional knowledge', as it does not have a universally agreed definition in international law;[7] and if it is recognised as a source of scientific knowledge. After this, I will then focus on the role of Indigenous peoples' TK in the face of threats of non-negligible harm to their traditional way of life. In doing so, and to obtain a better picture about the Indigenous cosmovision, livelihoods and disposition towards uncertainty and potential threats of harm (including examples of precautionary action adopted by Indigenous peoples and governments with their collaboration), I will rely on analyses of non-legal sources and studies from other disciplines, because most of

[3] Secretariat of the Permanent Forum on Indigenous Issues, "State of the World's Indigenous Peoples" (UN publications, 2009) ST/ESA/328 ('SOWIP'), p 84, noting the high correlation between the areas Indigenous peoples inhabit and high biological diversity; WWF report "Working with Indigenous and Local Knowledge Systems for the Conservation and Sustainable Use of Biodiversity and Ecosystem Services: An Analysis of Selected Case Studies from WWF Projects Worldwide as a Contribution to IPBES-2" (2013) ('WWF Report'), p 2.

[4] D. Posey, "Introduction: Culture and Nature-The Inextricable Link" in D. Posey (ed), *Cultural and Spiritual Values of Biodiversity* (UNEP, 1999), p 7; Berkes (n 1), p 249, "the distinction between nature and culture is meaningless"; SOWIP, p 52 noting that Indigenous peoples see themselves as part of nature; and A. Xanthaki, *Indigenous Rights and United Nations Standards* (CUP, 2007), p 15.

[5] SOWIP, p 52; D. McGregor, "Coming full circle: Indigenous knowledge, environment, and our future", American Indian Quarterly 28.3-4 (2004), p 391, noting that categories like art, religion or sciences do not exist in Indigenous thought. See also the "Indigenous peoples Earth Charter", from the Kari-oca Conference, 1992, para. 97 expressing that "[t]raditions cannot be separated from land, territory or science."

[6] C. Metcalf, "Indigenous Rights and the Environment: Evolving International Law" 35 Ottawa L. Rev. 101 2003-2004, p 106.

[7] A. Savaresi, "Doing the Right Thing with Traditional Knowledge in International Law: Lessons for the Climate Regime", University of Edinburgh, BENELEX Working Paper no 8, Research Paper Series No 2016/16, p 6.

the academic literature regarding Indigenous peoples' ways of life and their actions vis-à-vis their environment have been written by conservation biologists, ecologists, sociologists and anthropologists, as noted by Desmet.[8]

The second part of this chapter will focus on a regime where TK has been developed and explicitly incorporated in several instruments, influencing States' conduct and international jurisprudence:[9] the biodiversity regime. This regime has the objective to protect and conserve biodiversity, guided by the precautionary principle ('PP')[10] and taking into account the value of biodiversity and its uses (including cultural aspects) by local communities and Indigenous peoples, promoting their participation in decision-making. Considering this, it is important to analyse if this regime relies on TK for the adoption of precautionary measures and how would this enable Indigenous peoples' protection of their cultural and spiritual rights and traditional livelihood.

With this in mind, I will begin looking at Indigenous peoples' relationship with their environment and their traditional way of life (sections two and three), and then analyse the notion of TK and its scientific character (section four), which will be followed by its practical role regarding precaution (section five). In section six, I analyse the biodiversity regime, where although the most important legal instrument in this field, the CBD, mentions TK, its role in biodiversity conservation has been mostly developed through the work of the Ad-Hoc Open-ended Working Group on Article 8(j) and Related Provisions of the CBD, especially the Akwe: Kon Voluntary Guidelines for Cultural, Social and Environmental Impact Assessments;[11] the Mo'otz Kuxtal Voluntary Guidelines on Consent and Benefit-sharing from the use of Traditional Knowledge;[12] and the Tkarihwaié:ri Code of Ethical Conduct,[13] as well

[8] E. Desmet, *Indigenous Rights Entwined with Nature Conservation* (Intersentia, 2011), p 19.
[9] E. Morgera, "Under the radar: fair and equitable benefit-sharing and the human rights of indigenous peoples and local communities related to natural resources" BENELEX Working Paper N 10 (December 2016), and Savaresi (n 7), p 13.
[10] See Convention on Biological Diversity ('CBD'), UNTS vol. 1760, p. 79, 5 June 1992 (entry into force 29 December 1993), Preambular paras. 7-9 and Article 1.
[11] See Secretariat of the Convention on Biological Diversity, "Akwe: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessments regarding Developments proposed to take place on, or which are likely to impact on, Sacred Sites and on Lands and Waters Traditionally occupied or used by Indigenous and Local Communities" (CBD Guideline Series, 2004)('Akwe Kon Guidelines').
[12] Mo'otz Kuxtal Voluntary guidelines for the development of mechanisms, legislation or other appropriate initiatives to ensure the "prior and informed consent", "free, prior and informed consent" or "approval and involvement", depending on national circumstances, of Indigenous peoples and local

as in some other instruments established under the CBD. Finally, I end this chapter with some concluding remarks in section seven.

2. Indigenous peoples and the environment

'Environment' is a concept relatively new in international law, as the first major conference about it, the Stockholm Conference on Human Environment that started the modern era of international environmental law ('IEL'),[14] took place almost three decades after the UN Charter and the Universal Declaration of Human Rights (neither of which refers to 'environment'). Before this, environmental concerns were addressed as 'resources' issues and the responses tended to be ad-hoc in nature.[15] As noted in the previous chapter, this is a broad notion, difficult to define[16] which on occasions has been characterised as encompassing almost anything.[17] For example, the Brundtland report states that "the environment does not exist as a sphere separate from human actions, ambitions, and needs (…) the environment is where we all live";[18] the International Court of Justice ('ICJ') highlighted that "the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn";[19] and the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes

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communities for accessing their knowledge, innovations and practices, for fair and equitable sharing of benefits arising from the use of their knowledge, innovations and practices relevant for the conservation and sustainable use of biological diversity, and for reporting and preventing unlawful appropriation of traditional knowledge. ('Mo'otz Kuxtal'), CBD/COP/DEC/XIII/18, 17 December 2016.

[13] Secretariat of the Convention on Biological Diversity, "Tkarihwaié:ri Code of Ethical Conduct to Ensure Respect for the Cultural and Intellectual Heritage of Indigenous and Local Communities Relevant to the Conservation and Sustainable Use of Biological Diversity" ('Tkarihwaié:ri Code of Ethical Conduct')(Montreal, 2011).

[14] P. Sand, "The Evolution of International Environmental Law" in D. Bodansky, J. Brunnee and E. Hey (eds), *The Oxford Handbook of International Environmental Law* (OUP, 2008).

[15] D. Bodansky, J. Brunnee and E. Hey, "International Environmental Law: mapping the Field" in Bodansky et al (n 14), pp 2-3.

[16] See also T. Luke, "On Environmentality: Geo-Power and Eco-Knowledge in the Discourse of Contemporary Environmentalism" in N. Haenn and R. Wilk (eds), *The Environment in Anthropology: A Reader in Ecology, Culture and Sustainable Living*, p 259.

[17] P. Birnie, A. Boyle, and C. Redgwell, *International Law and the Environment* (3rd edition, OUP, 2009), pp 4-5, noting that 'environment' "could be used to encompass anything from the whole biosphere to the habitat of the smallest creature or organism."

[18] "Report of the World Commission on Environment and Development: Our Common Future" UNGA Res.42/187(1987).

[19] Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, ICJ Reports 1996, p. 226 para. 29.

establishes that 'transboundary impacts' means effects on the environment, including "effects on human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interaction among these factors; they also include effects on the cultural heritage or socio-economic conditions resulting from alterations to those factors".[20]

The environment has a crucial role sustaining human life and societies, being a healthy environment a precondition for the enjoyment of several rights (e.g., life, health, food) and socio-cultural development;[21] however, and albeit in some cases definitions refer to 'socio-economic conditions', IEL is mostly concerned with the protection of the physical environment such as lakes, rivers, animals, and the like.[22] The political, economic, social and cultural considerations are separated from environmental issues and are mainly addressed on the human rights field,[23] and treaties like the International Covenant on Civil and Political Rights[24] and the International Covenant on Economic, Social and Cultural Rights ('ICESCR'),[25] reflecting an approach that separates humans and nature.[26]

By contrast, Indigenous peoples do not have the same compartmentalised understanding of the 'environment'; they have an holistic conception of the world in which all elements, physical (living and inanimate) and spiritual are interconnected,[27] so 'nature' or 'environment' constitute another integral part of existence and not

[20] UNTS vol.1936, p. 269, Article 2.
[21] J. Knox, "Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment", A/HRC/37/59 (24 January 2018), para. 2.
[22] As noted by Bodansky, "international environmental law focuses primarily on the interactions of humans and the natural world— the air, water, soil, fauna, and flora." D. Bodansky, *The Art and Craft of International Environmental Law* (Harvard University Press, 2009) p 10; C. Redgwell, "International Environmental Law" in M. Evans, *International Law* (OUP, 5th edition), p 677.
[23] Boyle even notes that when environmental issues are raised in international cases, the complaint's focus is often shifted towards the human rights affected (property, health, etc). A. Boyle, "Human Rights and the Environment: Where Next?" European Journal of International Law, Volume 23, Issue 3, 2012 p 614. Several examples can be found in the following two chapters.
[24] UNGA, "International Covenant on Civil and Political Rights", 16 December 1966, UNTS, vol.999, p. 171.
[25] UNGA, "International Covenant on Economic, Social and Cultural Rights", 16 December 1966, UNTS, vol.993, p. 3.
[26] Bodansky (n 22), p 10.
[27] F. Lenzereni, "Indigenous Peoples' Cultural Rights and the Controversy over the Commercial Use of their Traditional Knowledge" in F. Francioni and M Scheinin (eds), *Cultural Human Rights* (The Hague: Martinus Nijhoff Publishers, 2008), pp 119-149.

something separated that requires protection.[28] This understanding is expressed in different international settings like the 1992 Indigenous Peoples Earth Charter ("[o]ur territories are living totalities in permanent vital relation between human beings and nature. Their possession produced the development of our culture");[29] the 1992 Kari-oca Declaration ("[w]e, the Indigenous peoples are connected by the circle of life to our lands and environments");[30] the 2002 Kimberley Declaration ("[o]ur lands and territories are at the core of our existence we are the land and the land is us; we have a distinct spiritual and material relationship with our lands and territories and they are inextricably linked to our survival");[31] the 2012 Kari-oca II Declaration ("Mother Earth is the source of life which needs to be protected, not a resource to be exploited and commodified as a 'natural capital.' We have our place and our responsibilities within Creation's sacred order");[32] and even during the drafting of UNDRIP. [33] This holistic conception greatly influences Indigenous peoples' livelihood and management of resources.

3. Indigenous peoples' traditional way of life

Indigenous peoples base their traditional way of life on the careful use of natural resources,[34] as illustrated by the words of a Saramaka representative: "[w]hen we cut trees, we think about our children, and our grandchildren, and future generations(…)

[28] See McGregor (n 5), pp 3-4; and Inter-American Court of Human Rights ('IACtHR'), "Mayagna (Sumo) Awas Tingni Community v. Nicaragua", Judgment of August 31, 2001, para. 149: "the close ties of Indigenous people with the land must be recognized and understood as the fundamental basis of their cultures, their spiritual life, their integrity, and their economic survival."
[29] Indigenous peoples Earth Charter, para. 32.
[30] Kari-oca Declaration, Brazil, 30 May 1992, in the context of the World Indigenous Conference in Kari-oca, Brazil.
[31] Kimberley Declaration, South Africa, 23 August 2002, in the context of the International Indigenous Peoples Summit on Sustainable Development, para. 6.
[32] Kari-oca 2 Declaration, 17 June 2012, in the context of the Indigenous Peoples Global Conference on Rio+20 and Mother Earth, para. 8.
[33] See C. Charters, "Indigenous Peoples' Rights to Lands, Territories and Resources in the UNDRIP: Articles 10, 25, 26, and 27" in J. Hohmann and M. Weller, *The UN Declaration on the Rights of Indigenous Peoples* (OUP2018), p 402. See also Chapter V, section 2.
[34] This has been often considered as 'sustainable'; see for instance A. Gray "Indigenous Peoples, Their Environments and Territories" in Posey (n 4), p 63 citing Whitt, arguing that Indigenous peoples have "the principles of sustainability embedded in their knowledge" but these can only be implemented by recognising their rights and respecting their culture; and Shelton (n 2), p 542, noting that that the intimate knowledge of their environment sustain a self-sufficient lifestyle over the long term.

[w]e are very careful not to destroy anything that is in the forest";[35] the Igorots traditional and ecologically sensitive mining activities (using hand tools, making narrow tunnels and without using chemicals) as opposed to the multinational corporations depredatory practices (poisoning water supplies and destroying mountainsides);[36] or the Moken rotating different food sources to avoid overuse and degradation.[37] This approach is very important for their survival, as they depend on their natural resources,[38] but it is also reflective of a worldview in which everything is connected and therefore sacred,[39] so unnecessary destruction can affect the immaterial world[40] and/or the communication with the spirits/ancestors that manifest in the form of animals.[41]

This lifestyle has inspired the inaccurate narrative that Indigenous peoples are 'conservationists' or 'ecologically noble savages'.[42] To begin with, they are not a monolithic group, and the degree of concern/awareness for the environment, the traditional practices, and the use of natural resources varies among them[43] (with some instances of depredatory practices).[44] Also, natural conservation efforts are

[35] IACtHR, "Case of the Saramaka People v. Suriname", Judgment of November 28, 2007 (Preliminary Objections, Merits, Reparations, and Costs), para. 144.
[36] G. Clarke, "From Ethnocide to Ethnodevelopment? Ethnic Minorities and Indigenous Peoples in Southeast Asia", Third world quarterly vol 22 No 3(2001), p 425.
[37] N. Arunotai, "Moken traditional knowledge: an unrecognised form of natural resources management and conservation" International Social Science Journal 58(187)(2006), p 144.
[38] Posey (n 4), p 4; Desmet (n 8), pp 48-9; Arunotai (n 37), p 144.
[39] Posey (n 4), p 4. The Maori for instance believes that all elements of the natural world and people descend from *Ranginui* and *Papatuanuku* and are thus related. See New Zealand Conservation Authority, "Maori customary use of native birds, plants and other traditional materials. Interim report and discussion paper" (Wellington, 1997)('Maori report'), p 84.
[40] For example, the Sarayaku believe that "the destruction of the jungle erases the soul", IACtHR, "Case of the Kichwa Indigenous People of Sarayaku v. Ecuador" ('Sarayaku case') Judgment of June 27, 2012 (Merits and Reparations), para. 151; and the Maori believe that the essential life-force (Mauri) can be weakened or destroyed by mistreating nature. Maori report, pp 85 -86.
[41] Maori report, p 85; P. Mwaura, *Indigenous Knowledge in Disaster Management in Africa* (UNEP 2008), p 51, noting how the Banyala consider pigeons as clan symbols; S. Laird, "Forests, Culture and Conservation" in Posey (n 4), p 357, mentioning the Kantu, who believe that the deities communicate through birds; WWF report, p 8 mentioning that the Udege consider the tiger the god of the forest.
[42] See for instance K. Redford, "The Ecologically Noble Savage", Cultural Survival Quarterly 15, No. 1(1991); this narrative is rejected by Indigenous peoples, Posey (n 4), p 7. Desmet mentions how this could impose excessive burdens on Indigenous peoples of acting in a certain way, affecting the recognition of their rights. Desmet (n 8), p 47.
[43] Gray (n 34) p 62 "for each Indigenous people, this nature-culture relationship is defined in specific ways, rooted locally in the territory." See also K. Redford and A. Steadman, "Forest-Dwelling Native Amazonians and the Conservation of Biodiversity: Interests in Common or in Collision?" p 251; and Desmet (n 8), p 50.
[44] M. Chapin, 'A Challenge to Conservationists' World Watch Magazine (November/December 2004), 17-31 p 18 mentioning as examples the Kayapó in Brazil logging their forests and Mayans slashing and burning the forests in Guatemala; and A. Ramos, The Hyperreal Indian" Critique of

generally based on a 'western' perspective of preservation (i.e., minimum human interference) designed without Indigenous peoples in mind,[45] generating conflicts with their way of life[46] and/or imposing restrictions on it (e.g., declaring illegal the use of traditional resources); [47] furthermore, concepts like 'conservation', 'sustainability' or 'biodiversity' are actually unknown and/or incompatible[48] with the Indigenous worldview, mainly because they present a perspective in which humans and nature are disconnected from each other, implying that they can be separated.[49] It would be more precise to say that while their management of resources has resulted in the protection of biodiversity, it is based "on other rationales than most Western nature management and conservation systems", [50] in line with their holistic cosmology and actions needed to ensure their survival. However, this has not prevented them to engage in partnerships for conservation projects[51] and participate in the drafting of instruments using 'western terminology' at the international level in

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Anthropology; 1994 vol 14(2), p 154, mentioning the example of some Tukanoans Indians in Brazil, pressured to make unsustainable deals with the military and mining companies. Desmet argues these conducts are a result of poverty and exposure to a liberal market economy, but that biodiversity threats still come mostly from habitat destruction, large developments, extractive projects and the like, not traditional or small-scale practices. Desmet (n 8), pp 51 and p 57; see also Redford and Steadman (n 43) p 251 (emphasizing external pressures on Indigenous peoples); and Shelton (n 2), p 542, noting that many problems faced by Indigenous peoples come from outside interference, not the preservation of their traditional economic resources and social structures

[45] E. Bernbaum, "Mountains: the Heights of Biodiversity" in Posey (n 4), p 342 citing Schaaf; Chapin (n 44) pp 18 and 21, noting that usually Indigenous peoples do not have a voice in conservation projects that are managed by NGOs, who in turn lack the proper understanding of situations and complain about them not being good conservationists. See also Desmet (n 8), p 48 and 66.

[46] L. Jan Slikkerveer, "Ethnoscience, TEK and its application to Conservation" in Posey (n 4), pp 192-3, citing R. Pierotti and D. Wildcat: "[l]iving with nature is very different from 'conservation' of nature. Those who wish to 'conserve' nature still feel that they are in control of nature, and that nature should be conserved only insofar as it benefits humans, either economically or spiritually. It is crucial to realize that nature exists on its own terms, and that non-humans have their own reasons for existence, independent of human interpretation." See also Arunotai (n 37), p 147, noting that the declaration of their territory as a national park and the promotion of tourism made the Moken adopt outsider's consumption behaviour, eroding their livelihood.

[47] Chapin (n 44) p 18; J. Alcorn, "Indigenous Peoples and Conservation A White Paper for The MacArthur Foundation" (April 2010) pp 6 and 21; SOWIP, pp 91-93; WWF report, p 15 mentioning the case of the BaAka and the restrictions suffered due to their hunting grounds being declared a National Park.

[48] Posey (n 4), p 7; Gray (n 34), p 62; SOWIP p 84; P. Nadasdy, "The Politics of Tek: Power and the "Integration" of Knowledge", Arctic Anthropology, Vol. 36, No. 1/2 (1999) pp 3-4, also mentioning that since terms like this do not have a counterpart in aboriginal languages, misunderstandings happen, leading to perceptions of bad faith, and biasing the discussion towards a western perspective.

[49] Desmet (n 8), p 58; Gray (n 34), p 62.

[50] J. Colding and C. Folke, "Social Taboos: 'Invisible' Systems of Local Resource Management and Biological Conservation" Ecological Applications 11(2), 2001, p 595; Desmet (n 8), p 50, concluding that Indigenous peoples are "neither intrinsic destroyers of nature nor ecologically noble savages".

[51] Alcorn (n 47), pp 15-21, mentioning both successful conservation examples like Tiburon island in Mexico and unsuccessful ones like the PEMASKY Biosphere Reserve project in Panama.

order to protect their rights.[52]

4. Traditional knowledge

The Indigenous peoples' special and collective relationship with their lands has enabled the development of a communal body of knowledge that is passed down through the generations, shared in socio-cultural settings (e.g., myths, story-telling, rituals),[53] with a strong spiritual component,[54] and which underpins their way of living,[55] known as 'traditional knowledge'. This knowledge is linked to their lands, so if Indigenous peoples are removed from them it can be seriously disrupted, not being able to be taught and experienced by subsequent generations and losing its concrete applications,[56] thus affecting not only every aspect of their traditional way of life but the environment itself.[57] The elders of the Ogiek people in Kenya for instance could not transmit the knowledge of their sacred sites to the new generations because they were evicted from their ancestral lands in the Mau Forest, cutting their access and depriving the Ogiek the possibility to protect them.[58]

This notion of 'traditional knowledge' is difficult to define because 'traditional' is an ambiguous concept that means different things depending on the

[52] For instance, in UNDRIP.
[53] Gray (n 34), p 64.
[54] Ibid., pp 63-64; McGregor, (n 5), p 388: "in the Aboriginal worldview, knowledge comes from the Creator and from the Creation itself". See also Posey (n 4), p 4.
[55] J. Seymour and H. Girardet, *Far from Paradise: The Story of Human Impact on the Environment* (3rd edition, Merlin Press, 1990), p 21, saying that Indigenous peoples' survival "through enormous spans of time is the best possible proof of their great range of knowledge"; A. Ross, K. Pickering Sherman, J. Snodgrass, H. Delcore and R. Sherman, *Indigenous Peoples and the Collaborative Stewardship of Nature: Knowledge Binds and Institutional Conflicts* (Left Coast Press, 2011), noting that pp 34-35.
[56] R. Barsh, "Indigenous knowledge and biodiversity", in Gray (n 34), p 75; Posey (n 4), p 5.
[57] See for instance, D. Vargas-Huinca, L. Araca, W. Vargas, J. Huanca and J Yang, "Conocimientos locales para la sostenibilidad de la biodiversidad y servicios ecosistémicos en las comunidades aymaras del sur del Perú" in Baptiste et al (n 2) p 107, documenting soil degradation and effects on biodiversity due to the loss of traditional Aymara practices; SOWIP p 66, noting there were more wildlife in the Massai territory in Kenya before the establishment of national parks and reserves; D. Smyth, "Indigenous land and sea management–a case study." (Canberra: DSEWPaC, 2011), p 11, noting the increase in wildfires in Australia following the removal of Indigenous peoples from certain areas.
[58] African Court on Human and Peoples' Rights, "African Commission on Human and Peoples' Rights v. Republic of Kenya", Application No 006/2012, Judgment, 26 May 2017, para. 158.

people and location,[59] and it is constantly evolving;[60] in addition, because of how it is conceived and used, Indigenous peoples generally disagree with conceptualisation attempts.[61] In general, TK is characterised as a broad notion[62] that includes knowledge, practices and innovations of Indigenous and local communities, as noted by the CBD Article 8(j) and the World Intellectual Property Organization ('WIPO').[63] The latter is working on a more detailed definition to protect TK within the intellectual property system, which currently states that TK "refers to knowledge originating from indigenous [peoples], local communities and/or [other beneficiaries] that may be dynamic and evolving and is the result of intellectual activity, experiences, spiritual means, or insights in or from a traditional context, which may be connected to land and environment, including know-how, skills, innovations, practices, teaching, or learning" [sic].[64]

There is another concept sometimes used in the literature, traditional ecological knowledge ('TEK'),[65] considered as a subset of TK more focused on natural resources, and the environment, without leaving aside the social/cultural/spiritual elements that permeate Indigenous conceptions;[66] yet, I will use the more commonly known TK (or sometimes Indigenous knowledge) because it encompass more broadly Indigenous practices/activities/knowledge.[67]

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[59] Berkes (n 1), pp 3-4; Posey (n 4), p 4; McGregor (n 5), p 390; Barsh (n 56), p 74, noting that 'traditional' refers to how the knowledge is acquired and used (unique to every Indigenous culture) and not antiquity.

[60] T. Stoll, "Intellectual Property and Technologies" in Hohmann and Weller (n 33), p 312; Human Rights Committee, General Comment No. 23: Article 27(Rights of Minorities), 8 April 1994, CCPR/C/21/Rev.1/Add.5 para. 7.

[61] McGregor (n 5), pp 389-90 highlighting that TK is a gift from the Creator, and that other aboriginal scholars question the need to define it; Barsh (n 56), pp 73-74, noting that Indigenous peoples prefer to focus more on the respect for the customary laws of the respective peoples and not definitions. Stoll (n 60), p 311 remarks that, in any case, Indigenous peoples as creators/practitioners, have wide discretion to decide what they consider TK is.

[62] Stoll (n 60), p 311.

[63] WIPO, "Glossary of Key Terms related to Intellectual Property and Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions" (April 10, 2019) WIPO/GRTKF/IC/40/INF/7 Annex, p 44.

[64] WIPO, "The Protection of Traditional Knowledge: Draft Articles" WIPO/GRTKF/IC/40/18 (June 2019), Annex, p 5. The parts in brackets indicate no consensus about them yet.

[65] See for instance, WIPO (n 63), pp 43-44. Berkes defines TEK as "a cumulative body of knowledge, practice and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment". Berkes, (n 1), p 7.

[66] WIPO, Glossary of Key Terms, pp 43-44; Berkes (n 1), pp 2-6.

[67] Berkes (n 1), p 9.

4.1 Traditional knowledge as a source of scientific knowledge

The recognition by the WIPO of TK as the result of an 'intellectual activity' and experiences that is dynamic and evolving goes in line with the academic literature; for instance, Gray mentions that TK "is not only a cerebral activity; it is also bound up in practical activity and technological systems reflecting both collective and personal experience and long-term observation";[68] the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services ('IPBES') notes that Indigenous knowledge continuously evolves through interactions between experiences and different kinds of knowledge that are empirically tested and validated by Indigenous peoples;[69] and Barsh highlights that each generation of Indigenous peoples make observations, compare their experiences with what they have been taught, conduct experiments to test the knowledge and exchange their findings to advance it;[70] among others.[71] In this sense, TK as an intellectual process to understand the universe[72] that is continuously evolving through observations and experiences in a systematic way, conforms with the general idea of 'science' (another concept not well-defined in international law),[73] i.e., "the intellectual and practical activity encompassing the systematic study of the structure and behaviour of the physical and natural world through observation and experiment".[74] This scientific

[68] Gray (n 34), p 62.
[69] IPBES "Work on indigenous and local knowledge systems (deliverable 1 (c))" IPBES 4/7 16 November 2015, p 8.
[70] Barsh (n 56), p 74.
[71] See also ACIA, *Arctic Climate Impact Assessment* (CUP, 2005), p 65 noting that Indigenous peoples in the Arctic have refined the information and observations through the generations, combining the lessons received from the elders with personal experiences. N. Chalmers and C. Fabricius, 'Expert and generalist local knowledge about land-cover change on South Africa's wild coast: Can local ecological knowledge add value to science?' Ecology and Society 12:10(2007), p 11, remarking that "[l]ocal knowledge, based on peoples' direct interactions with their environment, is accumulated on a trial-and-error basis through learning from feedback and interaction".
[72] L. Whitt, "Indigenous peoples, their environments and territories" in Gray (n 34), p 70.
[73] 'Science' is difficult to define, because of the different fields of science like natural and social sciences and humanities, and the various fields within these disciplines. F. Coomans, "A dual perspective on the right to enjoy the benefits of scientific progress" in G. Corradi, K. De Feyter, E. Desmet and K. Vanhees (eds), *Critical Indigenous Rights Studies* (Routledge 2019), p 94; Ross et al (n 55) p 55-56 noting that "Indeed, even the Western idealized model of science is complicated, and philosophers of science do not agree on what it entails."
[74] Oxford Online Dictionary, 2019, www.en.oxforddictionaries.com/definition/science [accessed May 2019].

character has been also recognised in international law; for instance, Agenda 21,[75] one of the most important action plans in international environmental law[76] that "reflects a global consensus and political commitment at the highest level on development and environment cooperation"[77] states that Indigenous peoples "have developed over many generations a holistic traditional *scientific* knowledge of their lands, natural resources and environment" [emphasis added];[78] the former Special Rapporteur of the Sub-Commission on Prevention of Discrimination and Protection of Minorities, in a 1993 study about the protection of Indigenous cultural heritage[79] mentioned that "Indigenous peoples' traditional knowledge of ecosystems includes(…) a wide range of scientific insights and understanding of basic processes in ecology and animal behaviour;"[80] the Committee on Economic, Social and Cultural Rights ('CESCR') in a General Comment[81] about ICESCR's Article 15.1(c)[82] noted that 'scientific productions' includes "knowledge, innovations and practices of indigenous and local communities";[83] the UNDRIP, widely supported in international law,[84] considered the "most advanced and comprehensive international instrument on Indigenous peoples' rights"[85] and constituting an authoritative reflection of an international consensus regarding Indigenous peoples' rights,[86] recognise Indigenous peoples' right "to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well

[75] Agenda 21 (A/CONF.151/26, vol. II), adopted by the UN Conference on Environment and Development on 14 June 1992.
[76] J. Friedrich, *International Environmental "soft law": The Functions and Limits of Non-binding Instruments in International Environmental Governance and Law* (Springer, 2013), p 21.
[77] Agenda 21, para. 1.3.
[78] Ibid., para. 26.1.
[79] E. Daes, "Discrimination Against Indigenous Peoples. Study on the protection of the cultural and intellectual property of indigenous peoples", E/CN.4/Sub.2/1993/28 (28 July 1993).
[80] Ibid., para. 140; see also paras. 3, 5, 18-19 and 21, among others, referring to Indigenous sciences.
[81] The UN Treaty Bodies elaborate general comments, addressed to all States parties, providing an authoritative interpretation of the respective treaty. See Chapter IV section 2.
[82] CESCR, "General Comment 17: The right of everyone to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he or she is the author", 12 January 2006, E/C.12/GC/1712.
[83] Ibid., para. 9. See also CESCR, "General Comment 21: Right of everyone to take part in cultural life", 21 December 2009, E/C.12/GC/21, para. 37, noting that Indigenous peoples can protect their right to maintain control over the manifestations of their sciences and technologies, including knowledge of the flora and fauna.
[84] See Chapter V, section 2.1.
[85] M. Fitzmaurice, "The 2007 United Nations Declaration on the Rights of Indigenous Peoples", Austrian Review of International and European Law 17: 139-266, 2012, pp 139-141.
[86] J. Anaya, "Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous People", 11 August 2008, A/HRC/9/9, para. 43.

as the manifestation of their sciences, technologies and cultures",[87] with the terms 'sciences' and 'technologies' covering "any findings, insights and knowledge";[88] and the 2016 American Declaration on the Rights of Indigenous Peoples,[89] adopted by consensus, expresses that "Indigenous peoples have the right to full recognition and respect for the ownership, dominion, possession, control, development, and protection of their tangible and intangible cultural heritage and intellectual property, including its collective nature", [90] being their 'collective intellectual property' composed by, among others, "traditional knowledge and traditional cultural expressions, including traditional knowledge associated with genetic resources, ancestral designs and procedures, cultural, artistic, spiritual, technological, and *scientific* expressions"[91] [emphasis added].

Some States with an important number of Indigenous habitants have also recognised the scientific character of TK; for example, the New Zealand government points out that both traditional knowledge and science "seek to make sense of the world, to render it comprehensible and to draw order out of apparent chaos; both are based on observations of natural species and phenomena and on generalisations deriving from those observations"; [92] the Australian Department of Industry, Innovation and Science has recognised that "Aboriginal and Torres Strait Islander peoples have unique knowledge systems that can contribute to all fields of scientific endeavour, including science-based activities such as the management of Australia's natural resources";[93] and the Finnish Ministry of the Environment has observed that in many cases TK has proved to be more accurate than modern science.[94] This is also noted in a more indirect way by Principle 22 of the Rio Declaration, [95] when acknowledges Indigenous peoples' "vital role in environmental management and

[87] UNDRIP, Article 31.
[88] Stoll (n 60), p 317; Coomans (n 73), p 92.
[89] American Declaration on the Rights of Indigenous Peoples, AG/RES.2888, (XLVI-O/16), Adopted at the third plenary session, held on June 15, 2016.
[90] Ibid., Article XXVIII para. 1.
[91] Ibid., para. 2. See also Coomans (n 73), p 92.
[92] Maori Report, p 89.
[93] Expert Working Group Report, "Indigenous Engagement with Science: Towards Deeper Understandings" August 2013, p vi.
[94] Ministry of the Environment of Finland, *Indigenous Peoples and Traditional Knowledge related to Biological Diversity and Responses to Climate Change in the Arctic Region* (CBD Secretariat, 2009) ('Finnish report'), p 4.
[95] 1992 Rio Declaration on Environment and Development ('Rio Declaration'), UN Doc. A/CONF.151/26 (vol. I)/31ILM874(1992), Principle 22.

development because of their knowledge and traditional practices", recognising TK as a useful form of knowledge equivalent to other forms of environmental management, which are often based on science;[96] and the former Special Rapporteur on Indigenous Peoples explicitly notes that "traditional knowledge of the environment can substantively enrich scientific knowledge and adaptation activities" in the context of climate change.[97]

This is also acknowledged by several authors; for example, Berkes states that "[b]oth western and indigenous science may be considered (….) the result of the same general intellectual process of creating order out of disorder";[98] Slikkerveer says that TK originated in "the human/scientific quest to come to terms with the universe", also highlight its intellectual nature;[99] Stevenson remarks that TK "is the intellectual product of countless generations of direct observation and intuitive experience handed down through oral tradition";[100] Hobson notes that "[w]estern science has been defined as a systematic approach, a methodological approach to answering questions. Science is equated with knowledge, and it is the development of knowledge that promotes the solution of problems(…) science also equates to traditional knowledge, and southern scientists must never forget that traditional knowledge is science";[101] Alessa et al prefer to use 'Indigenous science' instead of TK, because it better reflects the "cumulative place-based observations of natural phenomena that includes humans and non-human others and tends to integrate and acknowledge humans as a part of the natural world and its processes" conducted by Indigenous peoples;[102] and Barsh mentions that TK "is scientific in that it is empirical, experimental and systematic" and that Indigenous individuals "must be

[96] D. Brockington, R. Duffy and J. Igoe, *Nature Unbound: Conservation, Capitalism and the Future of Protected Areas* (Earthscan 2008), pp 151-152, naming the Convention on International Trade in Endangered Species as model on environmental management based on science; Chalmers and Fabricius (n 71), p 11. See also UNESCO Universal Declaration on Cultural Diversity (2001), Annex II, para. 14.
[97] V. Tauli-Corpuz, "Report of the Special Rapporteur on the rights of indigenous peoples", 1 November 2017, A/HRC/36/46, para. 15 ('2017 Report').
[98] Berkes (n 1), p 10.
[99] Slikkerveer (n 46), p 169.
[100] M. Stevenson, "Indigenous Knowledge in Environmental Assessment" Arctic, Vol. 49 No 3(1996) p 287.
[101] G. Hobson, "Traditional knowledge is science" Northern Perspectives 20(1992), p 1.
[102] L. Alessa, A. Kliskey, J. Gamble, M. Fidel, G. Beaujean and J. Gosz, "The role of Indigenous science and local knowledge in integrated observing systems: moving toward adaptive capacity indices and early warning systems", Sustainability Science, Vol 11(2016), p 91.

scientists in order to survive as hunters, fishers, foragers or farmers with minimal mechanical technology".[103]

Particular examples are not difficult to find; for instance, Inuit knowledge "is based on extensive, repeated observation and experience that is further verified, shared, and improved in a collective context. This implies both rigour and confidence in local understandings of complex systems,"[104] and an astrophysicist, Sagan, in describing the tracking abilities of the !Kung San from Botswana and Namibia, notes that they observe and analyse patterns following a certain methodology, akin to the one used in planetary astronomy to analyse craters, being these tracking skills "science in action".[105] In addition, TK's findings have been used (and abused) by pharmaceutical companies to develop medical products[106] and played an important role in climate change,[107] natural resources management[108] and geological data,[109] to name a few, indicating at the very least some degree of scientific corroboration and credibility. As especially noted by Chief Wavey, "[r]ecently, academics, scientific researchers and others have 'discovered' that the knowledge which indigenous people hold of the earth, its ecosystems, the wildlife, fisheries, forests and other integrated living systems is extensive and extremely accurate."[110]

Despite all this, there have been some reluctances to consider TK at the same

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[103] Barsh (n 56), pp 73-74. See also Ross et al (n 55), p 39 "Native peoples certainly think abstractly and build hypotheses."

[104] G. Laidler, "Inuit and Scientific Perspectives on the Relationship between Sea Ice and Climate Change: the Ideal Complement?" Climate Change 78 (2006), p 411.

[105] C. Sagan, The Demon Haunted World: Science as a Candle in the Dark (Ballantine Books, 1995), pp 295-296.

[106] E. Cloatre, "Biodiversity, knowledge and the making of rights: reviewing the debates on bioprospecting and ownership" in M. Bowman, P. Davies and E. Goodwin (eds.) *Research Handbook on Biodiversity & Law* (Elgar, 2016), pp 361-386.

[107] See for instance ACIA (n 71), Chapter 3 'The Changing Arctic: Indigenous Perspectives'; and D. Mijatović, F. Van Oudenhoven, P. Eyzaguirre and T. Hodgkin, 'The role of agricultural biodiversity in strengthening resilience to climate change: towards an analytical framework', International Journal of Agricultural Sustainability (2013)11:2, pp. 95-107 noting how Indigenous agricultural practices help to build resilience against climate change.

[108] See for instance Berkes (n 1), Chapter 4 'Traditional Knowledge Systems in Practice', and H. Moller, F. Berkes, P. O. Lyver, and M. Kislalioglu, 'Combining science and traditional ecological knowledge: monitoring populations for co-management', Ecology and Society 9(3):2(2004), p 11, noting that TK contributes to detect important changes in the environment and "pave the way for the formulation of useful scientific hypotheses."

[109] W. Masse and M. Masse, 'Myth and catastrophic reality: using myth to identify cosmic impacts and massive Plinian eruptions in Holocene South America' in L. Piccardi and W. Masse (eds.) *Myth and Geology* (Geological Society London, London, 2007).

[110] Chief R. Wavey, "International Workshop on Indigenous Knowledge and Community-based Resource Management: Keynote Address" in J. Inglis (ed), *Traditional Ecological Knowledge: Concepts and Cases* (IDRC, 1993), p 11.

level as 'conventional science',[111] with situations where the former was disregarded as 'anecdotal' or 'obsolete',[112] and experts having trouble in accepting that what they see as 'uneducated' people may know more about local species.[113] Likewise, some degree of mistrust from Indigenous peoples towards scientists exists because of their lack of understanding of TK, especially its holistic aspect[114] and the impossibility of 'delocalise' it, i.e., 'extract' and use TK without considering the cultural context,[115] at the risk of distorting it.[116] Some ideas to integrate western science and TK have been proposed, especially in natural resource management;[117] yet, it is also important to keep in mind that TK is primarily 'local', used to make decisions and set priorities for the community.[118]

From all this, it can be concluded that TK is a system of knowledge, able to support Indigenous peoples' traditional way of life and being applied in their daily activities. This knowledge has been tested and perfected through long periods of time by Indigenous peoples, in a systematic and rigorous fashion, and it is able to provide answers and predict outcomes, based on information and experiences; as such, it has a clear scientific nature. This means that TK can be integrated into the element of 'scientific uncertainty', constituting a knowledge-based source of information regarding 'reasonable grounds for concern' or 'credible threats' of serious/irreversible harm that may affect Indigenous peoples' way of life. As mentioned in the previous chapter, this expands the scope of the PP, which can be

[111] S. Mackinson, "Integrating Local and Scientific Knowledge: An Example in Fisheries Science", Environmental Management 27, pp 541-542; see also WWF report, p 8 and M. Tengö and E. Brondizio "Connecting Diverse Knowledge Systems for Enhanced Ecosystem Governance: The Multiple Evidence Base Approach" AMBIO, Vol 43(2014), p 583.
[112] WWF report, p 8; Nadasdy (n 48), p 3; Chalmers and Fabricius (n 71), p 11; M. Stevenson, "The Possibility of Difference: Rethinking Co-management", Human Organization, Vol. 65, No. 2(2006), p 170.
[113] Mackinson (n 111), p 542; Maori report p 135.
[114] Nadasdy (n 48), p 6.
[115] UN Economic and Social Council, "Protecting the rights of Aboriginal and Torres Strait Islander traditional knowledge", E/C.12/2000/17 (27 October 2000), para. 32, where an Indigenous representative noted that "[t]he traditional knowledge of Indigenous peoples provides the foundation of our personal identity and ancestral anchorage. It provides a distinctive world view that outsiders can rarely grasp." Gray (n 34), p 64 noting that "[s]ocio-cultural life, spirituality and biological diversity combine to provide the context for Indigenous knowledge".
[116] WWF report, p 9 "Cherry-picking" isolated and de-contextualized bits of information can end up trivializing and distorting traditional knowledge; Posey (n 4), p 5.
[117] See for instance, Moller et al (n 108), Chalmers and Fabricius (n 71); Tengö and Brondizio (n 111).
[118] ACIA (n 71), p 65.

then applied to deal with these potential threats and uncertainties, protecting their rights and values. This is especially important regarding possible effects over certain aspects particular to them, difficult to identify, understand, and address by non-indigenous persons.

5. Indigenous peoples, uncertainties, and traditional knowledge

As previously mentioned, there is a degree of uncertainty present in environmental issues, especially in situations of complex and dynamic interactions between human and natural systems, in which uncertainty is an inherent feature.[119] As noted in Chapter II, this requires a broader approach than the original narrow understanding of the precautionary principle,[120] insufficient to address these dynamics and relations; in the words of Moller et al, "[t]here is a growing recognition that conventional scientific approaches may be insufficient in the face of complexity."[121] This is the situation of Indigenous peoples, which have a special relationship with their lands and environment, constituting the foundation of their traditional livelihood, that relies on multiple and complex interactions; as such, a 'wider precautionary approach' that integrates TK is clearly relevant in this context. This is because, as mentioned above, this knowledge underpins and guides their traditional way of life, providing an integral understanding of every aspect of their livelihood, activities and practices; this includes a comprehensive knowledge of their territories and the interactions between its elements,[122] as well as the existence of risks and uncertainties. In effect, Indigenous cosmologies "portray a universe in continuous flux, driven by known forces as well as a diversity of powerful random elements ('tricksters'). Everything is bound eventually to change in ways that cannot be forecast accurately, hence the need for humans to remain vigilant and adaptive."[123] In this context, Ross et al note that knowledge that "allows for action in situations of

[119] R. Cooney, "A long and winding road? Precaution from principle to practice in biodiversity conservation" in E. Fisher, J. Jones and R. von Schomberg (eds) *Implementing the Precautionary Principle: Perspectives and Prospects* (Elgar, 2006), p 229. See also Chapter II section 3.2.
[120] Chapter II, section 4.3.
[121] Moller et al (n 108), p 12.
[122] Seymour and Girardet (n 55), p 21, noting that Indigenous peoples "must know and understand the environment they inhabit, its rock formations and watercourses, its caves, springs, plants and animals, if they want to survive in it."; Posey (n 4), p 5; Mwaura (n 41), p 56, WWF report, p 2.
[123] Barsh (n 56), p 74.

incomplete understanding" is more valuable than knowledge of facts because of its applications in real-world contexts.[124]

Following this, when confronted with credible evidence of possibly serious/irreversible consequences to their livelihood, they seemingly err on the side of caution.[125] For instance, Indigenous peoples in Africa mix maize with other crops like beans, potatoes or pumpkins, so if there are floods or droughts, at least one would survive;[126] the Mohawk, when gathering herbs, do not pick up the first medicinal plant they see but the second because "if you take that first one, who is to know, maybe that's the last one that exists in the world"';[127] and Polynesian navigators manage an incredible amount of data, intuitions and insights from a range of dynamic factors like the interactions of winds, waves, clouds, birds and fish behaviour and patterns, among others, to successfully complete their trips in the Pacific Ocean, avoiding storms and other possible risks in "the constantly changing world of weather and the sea".[128] This is also reflected in the maintenance of sacred sites (relevant for their survival as peoples),[129] which are usually under certain restrictions,[130] resulting in the conservation of ecosystems and biodiversity,[131] reducing in turn the risk of exposure to fluctuations in the abundance of species.[132] These precautionary attitudes are based on their experience and knowledge,[133] and extend to extraordinary incidents like catastrophic events, incorporated in Indigenous

[124] Ross et al (n 55), p 49.
[125] In line with their sustainable approach to natural resources management. See R. Cooney, "The Precautionary Principle in Biodiversity Conservation and Natural Resource Management: An issues paper for policy-makers, researchers and practitioners" IUCN Policy and Global Change Series No. 2(2004), p 27.
[126] Mwaura (n 41), p 33.
[127] J. Barreiro, "The Search for Lessons" Akwe:kon vol. 9 no 2(1992), p 21.
[128] W. Davis, *The Wayfinders: Why Ancient Wisdom Matters in the Modern World* (Anasi, 2009), chapter II "The Wayfinders".
[129] Pyhätunturi Statement Recognizing and Safeguarding Sacred Sites of Indigenous Peoples in Northern and Arctic Regions. Conference Statement and Recommendations from the International Conference "Protecting the Sacred: Recognition of Sacred Sites of Indigenous Peoples for Sustaining Nature and Culture in Northern and Arctic Regions" held in Pyhätunturi and Rovaniemi, Finland, on 11–13 September 2013, p 1; WWF report, p 18.
[130] Colding and Folke (n 50), pp 590-593.
[131] Ibid. See also M. Kahn, A. Khumbongmayum and R. Tripathi, "The Sacred Groves and Their Significance in Conserving Biodiversity: An Overview", International Journal of Ecology and Environmental Sciences 34(3)(2008), p 278, noting that rare or endangered plants and animals are often found in sacred groves, protected by Indigenous peoples due to cultural and religious beliefs.
[132] Barsh (n 56), p 75.
[133] ACIA (n 71), p 65, "Holders of this knowledge use it when making decisions or in setting priorities, and an understanding of the nature of this knowledge can help explain the rationale behind these processes".

stories as cautionary tales and lessons to be learned.[134] For example, the Moken avoided casualties during the Indonesian 2004 tsunami because they included in their stories the account of an event that happened long ago, the coming of waves that killed people, so when they saw the shore drying up, they ran to the mountains.[135]

Considering this, Indigenous peoples' TK constitutes the 'best information available' about their cultural, social and environmental aspects, as well as risks and uncertainties particular to them. This is especially relevant because it is increasingly the case that Indigenous peoples are threatened by outside interference, potentially disturbing their traditional livelihood in ways not always properly understood by outsiders and/or States.[136] This is perhaps more clearly reflected when it comes to sites of significant cultural and spiritual importance, which can be affected not only by extractive activities or projects, but also by actions that may be less harmful from a material point of view, and yet devastating on a cultural-spiritual plane.[137] Some examples are the use of helicopters which destroyed part of the Wichu kachi Mountain ("place of the parrots") in Sarayaku territory, causing the animals and the spirits to leave the place, rendering it sterile according to their traditions;[138] the risks faced by Suba sacred sites from outside presence, desecrated if visited by someone other than a ritual leader;[139] the fact that for the U'wa peoples, the extraction of any elements from their territory not in accordance with their cultural rules may affect their cultural integrity and cosmovision[140] and the possible disturbances caused by archaeologists when studying Indigenous artefacts or places.[141] Furthermore, alterations or interferences on sacred sites may change their special status or result in

[134] Masse and Masse (n 109), p 198.
[135] See Arunotai (n 37), p 143.
[136] L. Siwila, "An Encroachment of Ecological Sacred Sites and its Threat to the Interconnectedness of Sacred Rituals: A Case Study of the Tonga People in the Gwembe Valley", Journal for the Study of Religion 28.2(2015), p 145.
[137] Even activities that may seem harmless at first, like tourism or scientific endeavours. J. Hubert, "Sacred Beliefs and Beliefs of Sacredness" in D. Carmichael, J. Hubert, B. Reeves and A, Schanche (eds) *Sacred Sites, Sacred Places* (London: Routledge Publishers 1994), p 9-10.
[138] Sarayaku case, paras. 105 and 218 and footnote 291.
[139] Hubert (n 137), p 15.
[140] See Report of the Tripartite Committee, submitted following a Representation under article 24 of the ILO Constitution regarding ILO C169 Colombia 2001 (GB.277/18/1):(GB.282/14/4), para. 30.
[141] G. Nicholas, "The persistence of memory; the politics of desire: archaeological impacts on Aboriginal peoples and their response" in C. Smith and H.M. Wobst, *Indigenous Archaeologies: Decolonizing Theory and Practice* (Routledge 2005), p 81 "archaeology's focus on material culture and human remains may compromise other aspects of Aboriginal belief systems by ignoring the potentially animate qualities they may possess."

their abandonment, not only substantively affecting Indigenous peoples' cultural identity, but also causing severe environmental damage, like erosion or loss of biodiversity.[142]

Following this, TK has an important role in avoiding the materialisation of potentially non-negligible harm to Indigenous peoples, in particular in two aspects:

- first, and being the best information available about their traditional livelihood, TK can fill information gaps in issues like Indigenous' traditional practices; the status of their lands and resources; or where sites of significant cultural and spiritual importance are located, information not always widely known outside the Indigenous community. This provides a better sense of what is known/unknown, as well as identifying situations where there may be scientific controversies that need to be addressed. For instance, a joint survey between biologist and Kluane First Nation members was conducted, in order to assess lamb survival rates, during which only a small amount of sheep was spotted. For the Kluane this was clear proof of a steep decline in sheep population, as the place surveyed use to have hundreds or thousands of sheep at that time of the year; however, the biologists only saw an insufficient sample, despite Indigenous concerns.[143] Moving forward with a measure without having sufficient information could result in a failure to recognise and address potential risks and threats to Indigenous peoples' livelihood.
- second, closely related to the above, TK can determine the existence of uncertainties and possible risks of non-negligible harm to Indigenous peoples' way of life, as well as how to address them. This refers to both threats to their cultural and spiritual values (such as effects on sacred places,[144] or on spiritual celebrations[145]), but also to their territories[146] because, as noted by Chief Wavey, Indigenous peoples "spend a great deal of our time, through all seasons of the year, travelling over, drinking, eating, smelling, and living with the ecological system which surrounds us.

[142] Mwaura (n 41), p 10; see also Kahn et al (n 140), p 279, mentioning that the erosion of traditional beliefs has degraded sacred places, affecting the rich biodiversity once protected. See also *supra* 57.
[143] Nadasdy (n 48), p 9.
[144] Hubert (n 137), p 16 recounting how an Indigenous archaeologist decided against excavating a sacred site because of "the effects his interference would have on the status of the site" for the locals.
[145] Sarayaku case, para. 105, mentioning that due to outside interference the most important ritual which renews the links with the territory and social bonds, Uyantsa, was suspended.
[146] F. Berkes, J. Colding and C. Folke, "Rediscovery of Traditional Ecological Knowledge as Adaptive Management", Ecological Applications, Vol. 10, No. 5(2000), p 1254 noting how the "proximity of users to the resource confers an ability to observe day-to-day changes." Arunotai (n 37), p 145.

Aboriginal people often notice very minor changes in quality, odour and vitality long before it becomes obvious to government enforcement agencies, scientists or other observers".[147] This means that they can make predictions about potential impacts;[148] present alternatives and adjust their behaviour;[149] and draw attention to threats that otherwise may go unnoticed until it is too late, such as encroachment on their lands, illegal logging or mining in remote locations, and changes that could affect their traditional practices. For instance, the Rakiura Maori in New Zealand, when they noticed a steady decline in the number of Puffinus griseus, modified their traditional hunting goals and instigated an international cooperation effort to identify the reasons behind the decline, research that would have never started without their observations.[150]

To sum up, it is clear that TK, as a knowledge system of a scientific character, can be integrated into the notion of 'scientific uncertainty'. This means that TK constitutes a source of scientific information regarding reasonable grounds for concern about potentially non-negligible threats to Indigenous peoples' traditional livelihood, expanding the scope of the PP; as such, it triggers an obligation for States to avoid the materialisation of these potential threats. In this context, TK also provides the best information available about the determination of risks (especially those of a cultural/spiritual nature); the existence of uncertainties; and alternatives to address potential threats, playing a fundamental role in the adoption of effective precautionary measures, thus requiring its incorporation in the decision-making process,[151] at the risk of failing to comply with this 'wider' PP. As noted in the

[147] Wavey (n 110), pp 11-12.
[148] Barsh (n 56), p 73; Moller et al (n 108), p 5; Cooney (n 119), p 238 noting that Indigenous peoples "may have a better understanding of the dynamics of threat and risk than formal scientific or other institutions." See also J. Anaya, "Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous Peoples, Extractive industries and Indigenous peoples", 1 July 2013, A/HRC/24/41, para. 59, noting that they can "actively contribute to the prior assessment of all potential impacts of the proposed activity, including the extent to which their substantive rights and interests may be affected."
[149] See for instance, WWF report, p 4.
[150] Moller et al (n 108), p 11.
[151] J. Nauber and A. Paulsch (eds), *Indigenous valuation of biodiversity and ecosystem services compared to other ways of valuation in the context of IPBES*, (Federal Agency for Nature Conservation, 2014), p 16, arguing that holders of Indigenous knowledge should be involved, on an equal basis, in assessing, reviewing, and disseminating results, among others, "wherever issues touch upon their rights, territories and resources".

previous chapter,[152] this is achieved by recognising and respecting Indigenous peoples´ participatory rights, establishing mechanisms for them to freely express their concerns and expertise, and ensuring that they can influence the outcome of this decision-making process. In this context, an example is the adoption in Canada of a bill that requires the integration of scientific information and Indigenous knowledge in impact assessments to identify possible effects on their livelihood.[153] However, at the international level, the biodiversity regime provides a concrete example of Indigenous participation and the integration of TK in decision-making, due its extensive work on developing TK and considering Indigenous peoples concerns and interests in the conservation and sustainable use of species and ecosystems. Naturally, being the objective of this regime the protection of biodiversity, this is more oriented to environmental decision-making and the contribution of TK in this respect. Yet, it also recognises the role of TK as a source for the adoption of measures to avoid the materialisation of non-negligible harm to their traditional way of life, as I explore below.

6. Traditional knowledge and precaution in the biodiversity regime

The CBD is "the preeminent international legal instrument on the preservation of biological diversity",[154] and it has an almost universal reach (196 parties at the time of this writing) and a very wide approach, being potentially applicable to "all species in any habitat in the world".[155] It is a legally binding treaty that covers "all aspects of biodiversity, ranging from the conservation of biological diversity and sustainable use of biological resources to access to biotechnology and the safety of activities relating to modified living organisms".[156] To achieve its objectives (conservation, sustainable use, and fair and equitable sharing of the benefits of biodiversity),[157] it is guided by the PP, and it is complemented by a network of ancillary instruments,

[152] See Chapter II, section 4.3.
[153] House of Commons, Impact Assessment Act Bill c-69, adopted in June 2019.
[154] Desmet (n 8), p 126.
[155] See D. Ong, "International environmental law governing threats to biological diversity" in M. Fitzmaurice, D. Ong and P. Merkouris, Research Handbook on International Environmental Law (Elgar, 2010), p 523.
[156] Ibid., p 533, citing M. Bowman and C. Redgwell (eds), *International Law and the Conservation of Biological Diversity* (London: Kluwer Law International, 1996), p 1.
[157] CBD, Article 1.

focusing on more specific aspects of biodiversity conservation, that conform and advance its overall vision and objectives,[158] allowing the CBD to rapidly respond to ever-changing threats and uncertainties.

Its preamble recognises the Indigenous' traditional lifestyle based on biological resources, and highlights the role of TK and practices in "the conservation of biological diversity and the sustainable use of its components",[159] although the CBD does not explicitly refers to situations of potential threats of serious/irreversible harm, even though the PP being mentioned in this preamble as well.[160] The CBD also refers to Indigenous peoples in Article 10(c),[161] but the main reference is Article 8(j), in the context of *in-situ* conservation,[162] which establishes a very qualified obligation for each State to, "as far as possible and appropriate" and "subject to its national legislation" [163] respect, preserve and maintain Indigenous peoples' knowledge, innovations and practices, "relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge".[164] This covers not only Indigenous peoples but also the knowledge, innovations and practices of "local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity",[165] although the focus of this research is on Indigenous peoples' TK. Despite this, the CBD itself is silent about any precautionary role of TK,[166] an issue developed in those other instruments that focus on more specific aspects of biodiversity conservation.

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[158] M. Bowman, "Environmental protection and the concept of common concern of mankind" in Fitzmaurice et al (n 155), p 504.
[159] CBD, preambular para. 12.
[160] CBD, preambular para. 9. The CBD Guide notes that the preambular para. 8 ("Noting that it is vital to anticipate, prevent and attack the causes of significant reduction or loss of biological diversity at source") is also a reflection of the PP. See L. Glowka, F. Burhenne-Guilmin and H. Synge, *A Guide to the Convention on Biological Diversity* (IUCN, Gland and Cambridge, 1994) ('CBD Guide'), p 11.
[161] "Each Contracting Party shall, as far as possible and as appropriate: (c) Protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements".
[162] See CBD Guide, p 48. Article 2 defines in-situ conservation as "the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties."
[163] The implication is that national legislation takes precedence over this Article. CBD Guide, p 48.
[164] CBD, Article 8(j).
[165] Ibid.
[166] For instance, the CBD Guide does not make any references to a link between TK and the PP.

6.1 The Ad-Hoc Open-ended working group on Article 8 (j) and Related Provisions

Highlighting the importance of Article 8(j), the Conference of the Parties established in 1998 an Ad-Hoc Open-ended working group on Article 8(j) and Related Provisions of the CBD, to provide advice on the application and protection of TK, innovations and practices of Indigenous peoples and local communities as well as on the implementation of this Article.[167] Interestingly, the Decision that established this Ad Hoc Working Group highlights that "traditional knowledge should be given the same respect as any other form of knowledge" in the implementation of the CBD,[168] speaking to the scientific character of TK.

In implementing this mandate, the Ad-Hoc Working Group has consistently

- recommended and encouraged CBD Parties to incorporate TK, innovations and practices into their conservation efforts and the sustainable use of biodiversity,[169] promoting the full and effective participation of Indigenous peoples in the implementation of the Convention;[170]
- drafted a Voluntary Funding mechanism to facilitate the participation of Indigenous peoples in meetings held under the CBD;[171]
- finalised a report on the status and trends regarding TK, innovations and practices,[172] identifying measures and initiatives to protect, promote and facilitate their use in the management of protected areas (among them, Indigenous peoples'

[167] Established by the fourth meeting of the Conference of the Parties (COP4). See 'Report of the Fourth Meeting of the Conference of the Parties to the Convention on Biological Diversity', UNEP/CBD/COP/4/27 (15 June 1998), Decision IV/9 Implementation of Article 8(j) and related provisions, para 1.
[168] Ibid., preamble.
[169] See for instance 'Report of the Ad-Hoc Open-Ended Inter-Sessional Working Group on Article 8(j) and Related Provisions of the Convention on Biological Diversity on its Eleventh Meeting' CBD/WG8J/11/7 (22 November 2019), Recommendation 11/1 para 1.
[170] Ibid., Recommendation 11/2 para. 6, and Annex I, "Draft Objectives, General Principles, and Elements of Work for the New Programme of Work on Article 8(J) and Other Provisions of the Convention related to Indigenous peoples and Local Communities 2020-2050" para 1, among others.
[171] Adopted by the COP8. See 'Report of the Eighth Meeting of the Conference of the Parties to the Convention on Biological Diversity', UNEP/CBD/COP/8/31 (15 June 2006), Decision VIII/5: Article 8(j) and related provisions.
[172] Ad-Hoc Open-Ended Inter-Sessional Working Group on Article 8(j) and Related Provisions of the Convention on Biological Diversity, 'Composite report on the status and trends regarding the knowledge, innovations and practices of indigenous and local communities relevant to the conservation and sustainable use of biodiversity: Executive summary and recommendations' UNEP/CBD/WG8J/3/4 (28 September 2003).

full and effective role in decision-making in cooperation with local authorities,[173] their participation in the management of protected areas,[174] and the use of TK in community planning, and natural resources management);[175] and

- developed a Plan of Action on Customary Sustainable Use of Biological Diversity[176] that should be implemented with the "full and effective participation" of Indigenous peoples, [177] and reiterates the importance of TK in biodiversity conservation, highlighting that it "should be valued, respected and considered as useful(…) as other forms of knowledge".[178] It also highlights the contribution of Indigenous peoples' TK and their cultural and spiritual values and practices in maintaining biological diversity and ecosystem services, lands, waters and territories management, climate change adaptation and the strengthening the social and ecological systems' resilience;[179] among other initiatives.

All this indicates that Indigenous peoples' TK, innovations and practices (including cultural and spiritual) are generally considered as an important source of scientific information for the protection of biodiversity. More directly related to the PP, there are three outcomes from this Ad-Hoc Working Group which are very relevant:

a) the 2004 Akwe:Kon Voluntary Guidelines for Cultural, Social and Environmental Impact Assessments, which aims to, among other things, the avoidance of potential effects on Indigenous peoples' way of life, [180] incorporating their cultural, environmental and social concerns and interests (as well as their knowledge and practices) in impact assessments procedures, [181] and providing "concrete and systematic indications on how impact assessments should be conducted" when

[173] Ibid., para. 21.
[174] Ibid., para. 24.
[175] Ibid., paras. 26-27.
[176] Adopted by the COP12. 'Report of the Twelfth Meeting of the Conference of the Parties to the Convention on Biological Diversity', UNEP/CBD/COP/12/29 (17 October 2014), Decision XII/12: Article 8(j) and related provisions.
[177] Ibid., para. 2.
[178] Ibid., para. 3.
[179] Ibid., para. 6 (a)-(c) and (f), among others.
[180] Akwe:Kon Guidelines, foreword.
[181] Ibid., paras. 3 and 59, among others.

Indigenous peoples' may be affected.[182] In doing so, the PP plays an important role, establishing that "where there is a threat of significant reduction or loss of biodiversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat."[183]

The Akwe:Kon Guidelines establishes different types of impact assessments, to be conducted "whenever developments are proposed to take place on, or which are *likely to impact on, sacred sites* and on lands and waters *traditionally occupied or used*" by Indigenous peoples[184] [emphasis added], taking into account the diverse circumstances surrounding these developments.[185] These impact assessments provide information and a reliable and reasonable assessment of possible effects on a wide range of Indigenous aspects and values, to avoid and mitigate them, with their participation and incorporating their knowledge and practices. In this context, these Guidelines establish cultural impact assessments (which evaluate possible effects on values, beliefs, relationship with their environment and language); cultural heritage impact assessments (evaluating possible impacts on the physical manifestations of a community's cultural heritage, including sites and structures); social impact assessments (evaluating possible impacts on the quality of life and rights that have economic, social, cultural, civic and political dimensions); and EIAs (evaluating possible impacts on the environment and interrelated socio-economic and cultural elements).[186] Depending on the circumstances, some impact assessments may not be required; for example, in implementing the Akwe:Kon Guidelines in Finland, after some discussions between the government and the Saami peoples, it was determined that no new developments would affect sacred sites, which would continue to be managed and maintained as usual, so no cultural heritage impact assessments were needed nor conducted.[187]

The guidelines also detail a series of specific steps in conducting impact assessments, such as screening, scooping, impact assessment, mitigation measures,

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[182] E. Morgera, "Dawn of a New Day? The Evolving Relationship between the Convention on Biological Diversity and International Human Rights Law", BENELEX Working Paper no 17, p 8.
[183] Akwe:Kon Guidelines, para 61.
[184] Ibid., para. 1.
[185] Ibid., paras. 4-5.
[186] Ibid., para. 6 (a)-(b), (d) and (f).
[187] S. Juntunen and E. Stolt, *Application of Akwe:Kon Guidelines in the Management and Land Use Plan for the Hammastunturi Wilderness Area: Final Report* (Metsähallitus Natural Heritage Services 2013) ('Finnish Final Report'), pp 51-54.

reporting, review, decision-making and monitoring[188] and as part of those steps, the notification and consultation of Indigenous peoples, especially when there are 'likely' impacts on sacred sites, lands and waters traditionally used or occupied by them.[189] These consultations should take place from early on, beginning with the impact assessments' design and terms of reference;[190] during the screening and scoping stages (which are part of the preparatory stage);[191] and during the compilation and identification of habitats and species that could be affected,[192] as well as in the identification of the possible effects on sacred sites during cultural impact assessments,[193] among others. During these steps, Indigenous peoples' prior and informed consent should be obtained, as per the 'General Considerations'[194] and agreements should be reached regarding the implementation of measures to "prevent or mitigate any negative impacts of the proposed development".[195] This would ensure that their TK, concerns and interests are taken into account from early on, moving to identify and implement appropriate measures to avoid possible effects[196] but also gives them the opportunity to exercise control over the process, providing strong participatory mechanisms and instances to protect their socio-cultural rights. For instance, in the case of Finland mentioned above, the Finnish government was able gather more information and complete their baseline reports about customary use of natural resources and their cultural significance only after consulting Saami reindeer cooperatives,[197] designing then a draft impact assessment (with Saami representatives) further refined after negotiations with the Saami parliament, which subsequently approved it. This allowed the establishment of a management plan that avoided serious disruptions to the Saami livelihood and environment, allowing them

[188] Akwe:Kon Guidelines, para. 7.
[189] Ibid., paras. 8, 10, 11, 13 and 14. The way in which these consultations must be conducted is not detailed here.
[190] Ibid., paras. 13-14.
[191] Ibid., para. 7(a).
[192] Ibid., para. 37.
[193] Ibid., para. 32.
[194] Ibid., paras. 52-53. See also S. Rombouts, *Having a Say Indigenous peoples, international law and free, prior and informed consent* (Wolf Legal Publishers, 2014), p 330 pointing out that "in the Guidelines it is correctly stated that FPIC should be obtained in different phases in the process".
[195] Akwe: Kon Guidelines, paras. 8(i) and 21.
[196] Ibid., para. 3(b)-(c) and (e).
[197] Finnish Final Report p 33.

to continue with their traditional practices and sustainable use of natural resources, and the exercise of their cultural rights.[198]

In sum, these non-binding Guidelines, explicitly influenced by the PP, establish very high standards of participation for Indigenous peoples (different types of impact assessments, mitigation measures and consultation processes where their consent or approval should be obtained), incorporating their TK and concerns and enabling the early identification and assessment of possible risks in every aspect of their traditional way of life,[199] with a particular emphasis on spiritual and cultural manifestations (like sacred sites), protecting both Indigenous peoples' livelihood and their environment from potentially serious threats of harm, in the absence of full scientific certainty.

b) the 2011 Tkarihwaié:ri Code of Ethical Conduct, which aims to provide guidance to State parties in interacting with Indigenous peoples and preserve, respect and maintain their TK. [200] Section 2 of this Code establishes that "[a]ny activities/interactions related to traditional knowledge associated with the conservation and sustainable use of biological diversity, occurring on or *likely to impact on sacred sites* and on lands and waters *traditionally occupied or used* by Indigenous and local communities and impacting upon specific groups, should be carried out with the prior informed consent and/or approval and involvement of Indigenous and local communities(…)"[201] [emphasis added]; furthermore, paragraph 16 expressly mentions the PP, stating that the assessment of potential harms to biological diversity should "fully involve the relevant Indigenous and local communities", which is also reaffirmed in section 3.[202] Although it does not specify exactly how this consent should be obtained or what full involvement means, this ethical code has to be read in conjunction with other CBD instruments, including the

[198] Ibid., pp 37 and 53.
[199] The Finnish report highlights that the application of these Guidelines improved the precision of planning thanks to the more detailed information received from the Saami. Finnish Report, pp 57-59.
[200] Tkarihwaié:ri Code of Ethical Conduct, Introduction, pp 4-5. The introduction also notes that one way of respecting TK is to value it "equally with and complementary to scientific knowledge", highlighting its scientific nature.
[201] Ibid., para. 11.
[202] Ibid., para. 30, recognizing the crucial role of Indigenous peoples' effective and full participation in activities related to biodiversity and conservation that 'may' impact them.

Akwe:Kon Guidelines,[203] so it is possible to assume that this involves consultations and impact assessments in situations "likely to impact on sacred sites and on lands and waters traditionally occupied or used" by Indigenous peoples.

c) the 2016 Mo'otz Kuxtal Voluntary Guidelines on Indigenous Consent, which are intended to ensure that Indigenous 'prior and informed consent'; 'free, prior, and informed consent' or 'approval and involvement' is obtained when it comes to the use of TK.[204] These Guidelines were developed pursuant to COP Decision XII D, with the objective to provide "consistency throughout the programme of work on Article 8(j) and related provisions" (including the CBD and the Tkarihwaié:ri Code of Ethical Conduct),[205] thus having a common understanding of certain terms used in the biodiversity regime. This objective of harmonization is also expressed in the latest COP meeting, noting that all tools and guidelines developed by this working group "are interrelated and mutually supporting" in particular the Mo'otz Kuxtal Voluntary Guidelines on Indigenous Consent.[206] In this context, 'free' implies that Indigenous peoples "are not pressured, intimidated, manipulated or unduly influenced and that their consent is given, without coercion";[207] 'prior' implies "seeking consent or approval sufficiently in advance of any authorization to access traditional knowledge respecting the customary decision-making processes" and Indigenous peoples' time requirements;[208] 'informed' implies that information about relevant aspects should be provided, including "the intended purpose of the access; its duration and scope; a preliminary assessment of the likely economic, social, cultural and environmental impacts, including *potential risks*; personnel likely to be involved in the execution of the access; procedures the access may entail and benefit-sharing arrangements" [209] [emphasis added]; and 'consent or approval' is the

[203] Ibid., foreword and introduction.
[204] Mo'otz Kuxtal Voluntary Guidelines on Indigenous Consent, para. 1.
[205] Decision XII/12 D on tasks 7, 10 and 12 could best contribute to work under the Convention and to the Nagoya Protocol and Mo'otz Kuxtal Voluntary Guidelines on Indigenous Consent, para. 2.
[206] Report of the Fourteenth Meeting of the Conference of the Parties to the Convention on Biological Diversity', UNEP/CBD/COP/14/4 (20 March 2019), Decision 14/12: Introduction to the Rutzolijirisaxik Voluntary Guidelines for the Repatriation of Traditional Knowledge of Indigenous Peoples and Local Communities Relevant for the Conservation and Sustainable Use of Biological Diversity Article 8(j) and related provisions, paras. 4-5.
[207] Mo'otz Kuxtal Voluntary Guidelines on Indigenous Consent, para. 7 (a).
[208] Ibid., para 7 (b).
[209] Ibid., para. 7(c); see also para. 17(c)(ii).

agreement of Indigenous peoples to grant access to TK and "*includes the right not to grant consent or approval"* [emphasis added];[210] even when the consent is granted, it is only temporary unless agreed otherwise.[211] It also clarifies that 'involvement' refers to "the full and effective participation" of Indigenous peoples in decision-making processes; that "[c]onsultation and full and effective participation of [I]ndigenous peoples (…) are crucial components of a consent or approval process";[212] and that FPIC, or approval and involvement do not follow a 'one-size-fit-all' approach, varying according to the circumstances, although should always be implemented through a continuous process aimed to build "mutually beneficial, ongoing arrangements between users and holders" of TK based on trust, good relations and mutual understandings, and with the full and effective participation of Indigenous peoples.[213] These Guidelines do not define 'consultation', but it can be argued that they follow the understanding included in UNDRIP, based on Decision 14/12, which highlights the importance of harmonizing various instruments, standards, programmes and processes, and expressly mentions UNDRIP.[214]

These three instruments drafted by the Ad-Hoc working group clearly establish a role for TK and cultural, environmental and social concerns through important participatory mechanisms (impact assessments, conservation/mitigation measures and Indigenous consultation) in situations of potential harm and uncertainty, guided by the PP, even including a stronger safeguard in the form of consent, in at least certain situations where impacts on cultural values could be of a substantive nature, such as possible effects on sacred sites and lands and waters traditionally occupied and used by Indigenous peoples. This not only provides a strong degree of protection to their spiritual and cultural values, but also ensures that Indigenous interests and concerns will be taken into account in the decision-making process.

Although these are non-binding instruments, meaning that strictly speaking there is no legal obligation for States to implement them, they were adopted in COP

[210] Ibid., para 7(d).
[211] Ibid., para. 11.
[212] Ibid., para. 7(e); see also para. 17(f).
[213] Ibid., paras. 8-9.
[214] Decision 14/12, para 5. See Chapter V section 2.

decisions by consensus of the States parties to the CBD. This is important because as noted by Parks and Schröder, COP decisions are used to implement the legally-binding CBD and "represent the source for understanding how its interpretation has evolved", having then "political and legal weight and can influence both the subsequent development of international and regional rules, and the interpretation of existing norms". [215] Morgera also notes that these decisions are "carefully negotiated", can be "considered a source of 'universal consensus on the scope of a protected interest' that legitimizes and promotes consistent State practice"[216] and that they are influential in developing international law, with for instance the IACtHR considering the CBD and the COP decisions as "mutually supportive of indigenous and tribal peoples' rights".[217] In this context, when it comes to the assessment of possible environmental, social, cultural and spiritual effects on Indigenous peoples, States do not have an obligation to rely on the Akwe:Kon Guidelines; they could use other instruments or domestic legislation, as long as they achieve the same outcome, that is, the avoidance of potentially serious harm to the environment or Indigenous peoples' way of life. That being said, the guidance provided by Akwe:Kon Guidelines "cannot be found in the relevant international human rights law sources",[218] as they are "one of the most comprehensive and used standards for environmental and social impact assessments" in an Indigenous peoples' context;[219] and it is unlikely that a proper assessment of impacts of project on Indigenous peoples' lands and environment, vital for decision-making about possible risks, can be done without the guidance of the Akwe:Kon Guidelines, especially considering the role of TK in detecting "unforeseen effects and impact",[220] particularly those of a socio-cultural and spiritual nature. This is reflected in practice, as for example their

[215] L. Parks and M. Schröder, "What we talk about when we talk about 'local' participation in international biodiversity law: The changing scope of Indigenous peoples and local communities' participation under the Convention on Biological Diversity", PACO, Issue 11(2)(2018), pp 750 and 754.
[216] Morgera (n 9), p 20.
[217] Ibid., p 12.
[218] Morgera (n 182), p 7.
[219] IACtHR, "Case of the Saramaka People v. Suriname", Judgment of August 12, 2008 (Interpretation of the Judgment on Preliminary Objections, Merits, Reparations and Costs), para. 41, footnote 21. See also J. Anaya, "Report of the Special Rapporteur on the situation of human rights and fundamental freedoms of Indigenous people" A/HRC/15/37, 19 July 2010, para. 73, considering the Akwe:Kon Guidelines as a reference for impact studies in relation to Indigenous peoples because of their human rights based approach.
[220] Rombouts (n 194), p 331.

implementation allowed the Finnish government to address Saami concerns about the protection of their culture; improved their engagement in decision-making; and avoided potential harm to their livelihood in a way that it would have been difficult to achieve without these Guidelines;[221] however, it is also true that these instruments have not yet been widely applied by States.[222]

6.2 Other instruments adopted by the COP

The acknowledgment of the role of TK in avoiding potential harm, its incorporation in decision-making, and the establishment of participatory mechanisms that allows Indigenous peoples to protect their livelihood (including cultural and spiritual values), is also present in other soft-law instruments adopted by consensus by the COP, such as the 2004 Ecosystem Approach Implementation Guidelines,[223] which establish a strategy (the 'ecosystem approach') "for integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way".[224] This approach is based on the application of scientific methodologies that focuses on levels of biological organization, like processes, functions and interactions between different organisms and their environment, including humans and their cultural elements,[225] constituting a complex web of dynamic interactions where there is a constant degree of uncertainty and surprises.[226] To deal with this and anticipate changes, the ecosystem approach "requires adaptive management", which includes 'learning-by-doing' and adopting measures even "when some cause-and-effect relationships are not yet fully established scientifically",[227] based on the best information available.[228] In doing so, it

[221] Finnish Final Report, pp 8 and 61.
[222] For instance, Suriname has not yet implemented measures to ensure that impact assessments, in conformity with the Akwe:Kon standards, are conducted before awarding concessions in Indigenous lands. IACtHR, "Case of the Saramaka People v. Suriname", Order of September 26, 2018 (Monitoring Compliance with Judgment), p 17.
[223] See Secretariat of the Convention on Biological Diversity, "The Ecosystem Approach", (CBD Guidelines, 2004). Adopted by the COP7. 'Report of the Seventh Meeting of the Conference of the Parties to the Convention on Biological Diversity', UNEP/CBD/COP/7/21 (13 April 2004), Decision VII/11.
[224] Ibid., para. 1.
[225] Ibid., para. 2.
[226] Ibid., para. 4; Principle 3 rationale and Principle 9 rationale, among others.
[227] Ibid., para 4. See also Principle 6 annotations to the rationale, and Implementation guidelines 6.2.
[228] Ibid., Foreword; see also Principle 11, stating that the ecosystem approach should consider all forms of relevant information, including TK.

recognises an important participatory role for Indigenous peoples (whose rights and interests should be taken into account as relevant stakeholders and should be effectively involved in decision-making) [229] and TK (as a source of relevant information and expertise, together with scientific knowledge),[230] in detecting and understanding ecosystem changes and generating adaptation measures. [231] The integration of TK is done through EIAs and Strategic EIAs, which should be carried out in the case of developments that "*may* have substantial environmental impacts"[232] [emphasis added]. In doing so, other decisions adopted by the COP under Article 8(j) should be considered,[233] arguably a reference to the Akwe:Kon Guidelines (adopted at the same meeting), providing further guidance regarding how EIAs (and presumably cultural, cultural heritage and social impact assessments) should be conducted to avoid potentially non-negligible harm to the environment and Indigenous peoples' rights.

This is not the only instrument that contains this reference to decisions adopted under Article 8(j); there is also the 2004 'Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity',[234] which provide a framework to ensure that the use of biological diversity would not lead to its long-term decline.[235] In doing so, it establishes that natural resources and management should take into account the PP[236] and adaptive management, due to the impossibility of "having knowledge of all aspects" of biological systems, relying on various sources of information, in particular scientific knowledge and TK.[237] Moreover, in their role as user and managers of natural resources, Indigenous peoples' rights should be recognised and respected, and they should participate in decision-making, enabling

[229] Ibid., Principle 1 rationale and annotations to rationale. See also Implementation guidelines 1.4 and 1.5.
[230] Ibid., Principle 11, Principle 11 rationale and Implementation guidelines 11.2.
[231] Ibid., Implementation guidelines 9.9.
[232] Ibid., Implementation guidelines 3.3. and 6.6.
[233] Ibid., Principle 11 rationale and Implementation guidelines 11.3.
[234] Secretariat of the Convention on Biological Diversity, "Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity", (CBD Guidelines, 2004). Adopted by the COP7. 'Report of the Seventh Meeting of the Conference of the Parties to the Convention on Biological Diversity', UNEP/CBD/COP/7/21 (13 April 2004), Decision VII/12.
[235] Ibid., introduction.
[236] Ibid., Practical Principle 5 Operational guidelines; see also para. 8(f).
[237] Ibid., Practical Principle 4 and Practical Principle 4 rationale. See also Practical Principle 6 Operational guidelines, encouraging collaboration between scientific research and TK and the involvement of Indigenous peoples as research partners, using their expertise to assess management methods and technologies.

them to reinforce and protect their rights.[238] The Addis Ababa Principles do not clearly state how this participation should take place, but as per the link to the Akwe:Kon Guidelines, it is presumably through their involvement in impact studies (including cultural and social ones), consultations, the adoption of conservation/mitigation measures and consent in certain cases.

There are also the Voluntary Guidelines on Biodiversity-Inclusive Impact Assessment, [239] which have the objective to reach a "better integration of biodiversity-related considerations into the EIA process".[240] Like the previous two instruments, these Voluntary Guidelines acknowledge that there is a degree of uncertainty present when dealing with biodiversity, which can be addressed by relying on the PP during impact assessment processes, [241] evaluating the *likely* environmental impacts of a project or development, considering inter-related socio-economic, cultural and human health impacts. [242] Due to the importance of Indigenous peoples in the conservation and sustainable use of biodiversity, these Voluntary Guidelines expressly require their involvement, stating that, as relevant stakeholders, their participation is a "precondition for a successful EIA", [243] and recommending to "actively seek information from relevant stakeholders and Indigenous and local communities",[244] integrating their interests and concerns. One way to do this is through consulting stakeholders at the time of defining the focus of the EIA and the identification of key issues, allowing Indigenous peoples to bring attention to potential effects on ecosystems and ecosystem services and the measures to avoid or mitigate them, contributing with their TK to account for gaps in knowledge. [245] More importantly, these Voluntary Guidelines should be used in

[238] Ibid., Practical Principle 2 rationale; Practical Principle 9 rationale and Operational guidelines; and Practical Principle 12 rationale and Operational guidelines.
[239] Adopted by the COP 8, (n 171), Decision VIII/28.
[240] Voluntary Guidelines on Biodiversity-Inclusive Impact Assessment, para. 1.
[241] Ibid., para. 30. See also para. 42, emphasising the application of the precautionary principle in situations of scientific uncertainty.
[242] Ibid., para 5.
[243] Ibid. See also para. 35, highlighting the importance of full and effective participation of Indigenous peoples throughout this process, to ensure that the information for decision-makers is sufficient, focuses on key issues and it is scientifically and technically accurate.
[244] Ibid., para. 31 c.
[245] Ibid., paras. 20 and 20 (b), 22-23 and 25, among others.

conjunction with the Akwe:Kon Guidelines, as explicitly stated in both the Voluntary Guidelines and the COP decision that adopted them.[246]

These three instruments seem to focus more on potential effects on elements of an environmental character, and the role that TK and Indigenous participation can have in protecting biodiversity (e.g., providing information, identifying threats), once again highlighting the role of TK in adopting environmental actions, including in situations of uncertainty. However, the reliance on the Akwe:Kon Guidelines and references to Indigenous peoples' rights shows that their way of life and socio-cultural practices are also considered in these instruments, protecting their livelihood from potentially non-negligible threats of harm but also showing an integrated approach across the biodiversity regime.

In sum, the biodiversity regime incorporates TK as a relevant source of scientific information in general and also in situations of potential threats of non-negligible harm to the environment and Indigenous peoples' rights, establishing important participatory mechanisms for them to effectively get involved and influence decision-making processes. This allows them to not only complete the information needed to avoid the materialisation of potential threats, identify risks and propose way to address them, but also protect their traditional way of life, especially their spiritual and cultural aspects and manifestations (like sacred sites), an area where without Indigenous participation it would be very difficult to overcome the lack of information. These participatory mechanisms also seemingly ensure that, considering the circumstances, in the face of more substantive threats (including those affecting spiritual rights), Indigenous peoples have a stronger safeguard in the form of consent, in my view following a precautionary approach and logic of the higher the risk the greater the need for precaution.

7. Concluding remarks

Indigenous peoples have a particular way of life, based on a close relationship with their land and where spiritual, social, cultural and environmental elements are

[246] Ibid, Box 1. See also COP Decision VIII/28 para. 1.

intertwined. This livelihood has enabled the development of a body of knowledge, TK, that reflects an integral understanding of several processes and dynamics, including risks and uncertainties, allowing for the careful use of natural resources and conservation of biodiversity and, in situations of potential threats of serious/irreversible harm, to act erring on the side of caution. Although difficult to define, this knowledge is recognised as an intellectual process, a system of knowledge based on observations and experiences tested in rigorous ways, able to predict outcomes and provide answers; as such, it conforms to the general idea of 'science' and it is recognised in international law as a source of scientific knowledge.

Because it includes environmental, social, cultural and spiritual aspects, it provides a different understanding of risks and uncertainties that the narrow notion of 'scientific uncertainty', shaped by conventional science, does not regularly address. This is particularly important due to the increasing threats faced by Indigenous peoples from human activities, such as development projects and extractive industries, which can deeply disturb their traditional livelihood and special relationship with their lands. In this sense TK, as a 'scientific' system of knowledge, broadens this narrow notion, expanding the PP to protect Indigenous peoples' rights, also playing an important role as the 'best information available' by filling information gaps and identifying threats of non-negligible harm to Indigenous peoples' way of life and how to address them. In this context, TK must be incorporated in decision-making, at the risk of failing to comply with this 'wider' precautionary approach, which requires the recognition and respect of Indigenous peoples' participatory rights, and mechanisms to implement them.

An example of a regime that follows this is the biodiversity regime, which is guided explicitly by a precautionary approach. This regime establishes participatory mechanisms in soft-law instruments, such as Indigenous consultations and cultural, social and environmental impact assessments, ensuring that their concerns, knowledge and practices are considered in decision-making, avoiding potential adverse impacts on their livelihood as well as biodiversity (being the protection of the latter the focus of this regime). There is even the recognition of an enhanced safeguard, consent, when there could be impacts on cultural/spiritual aspects that constitute a vital part of Indigenous way of life, i.e., sacred lands or waters

traditionally used by them, providing a strong degree of protection. Despite the fact that these instruments are non-binding in a strict sense, they were carefully negotiated and reflect a consensus from the State parties to the CBD, interpreting the way in which the CBD should be implemented, so they represent an important standard and guidance, although there is no widespread practice by States in this respect yet. Regardless, it provides an important model that acknowledges and important role for TK and Indigenous participation in the avoidance of potential threats of non-negligible harm to their traditional way of life. The question that remains is if this is also the case in the field of human rights, which I analyse in the next chapters.

Chapter IV: The Protection of Indigenous Peoples' Rights in the UN Treaty System and the ILO Convention 169

1. Introduction

As previously noted, Indigenous peoples have a deep relationship with their lands and territories, as well as a profound knowledge of the interactions between its elements, including the awareness of uncertainties. To protect this special relationship and their sustainable way of life, Indigenous peoples rely on their traditional knowledge ('TK'), playing an important role in the avoidance of potentially serious/irreversible harm, as discussed in the previous chapter. Considering this, at least one regime in international law, the biodiversity regime (explicitly guided by a precautionary approach), incorporates TK in decision-making in situations of potential threats of serious/irreversible harm to both biodiversity and

their traditional livelihood. This is done through various types of impact assessments, as well as the recognition of the need to consult Indigenous peoples; in addition, when the potential effects could affect more essential values, like sacred sites, consent should be obtained as a heightened safeguard.

Being Indigenous peoples situated at the intersection between international environmental and human rights law,[1] it is important to continue this analysis in the latter field; as such, in this chapter I analyse first the UN Treaty System ('UNTS'), more specifically, the three treaties that have addressed Indigenous issues more often: the International Covenant on Civil and Political Rights ('ICCPR'),[2] the International Covenant on Economic, Social and Cultural Rights ('ICESCR'),[3] and the International Convention on the Elimination of All Forms of Racial Discrimination ('ICERD'),[4] ('the Conventions'), followed by the International Labour Organization Convention concerning Indigenous and Tribal Peoples in Independent Countries C169 ('C169'),[5] the only treaty regarding Indigenous peoples in international law.

As human rights instruments, it is not surprising that the precautionary principle ('PP'), more identified with environmental law, is not explicitly mentioned; however, this does not mean that in situations of potential threats of serious harm to Indigenous peoples' way of life the PP is absent; in fact, there seems to be an implicit reliance on this principle when it comes to the identification of risks and threats, with an important role for TK in decision-making, allowing Indigenous peoples to influence the outcome. Yet, there are other situations, like potential threats of a substantive nature or where cultural and spiritual values are involved, where there is some controversy about the degree of protection provided by these instruments and their effectiveness, in particular regarding 'obtaining' or 'seeking' free, prior, and informed consent ('FPIC').

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[1] C. Metcalf, "Indigenous Rights and the Environment: Evolving International Law" 35Ottawa L. Rev. 101 2003-2004, p 106.
[2] UNGA, "International Covenant on Civil and Political Rights", 16 December 1966, UNTS, vol. 999, p. 171.
[3] UNGA, "International Covenant on Economic, Social and Cultural Rights", 16 December 1966, UNTS, vol. 993, p. 3.
[4] UNGA, "International Convention on the Elimination of All Forms of Racial Discrimination", 21 December 1965, UNTS, vol. 660, p. 195.
[5] Indigenous and Tribal Peoples Convention, C169, 27 June 1989, C169, entered into force 5 September 1991. The UN Declaration on the Rights of Indigenous Peoples ('UNDRIP') and regional systems will be analysed on the next chapter.

I begin with the analysis of the UNTS, starting section two with a brief summary of the ICCPR, ICESCR and ICERD and their compliance mechanisms, including how the bodies deal with future harm and uncertainties, and assessing the influence of the PP (if any), in upholding the rights recognised by the Covenants. The analysis of the situation of Indigenous peoples is in section three, looking especially into issues of cultural rights and 'effective participation' (as a way to protect the former) in the complaint and reporting procedures, where there are indications that TK plays a role in the avoidance of potential harm. Yet, there is also a lack of clear and consistent practice, especially when it comes to an enhanced safeguard, obtaining FPIC, which creates uncertainties and weakens the protection of Indigenous peoples' rights. I conclude the analysis of the UNTS with an assessment in section four. Section five has a brief overview of the C169 and the rights that it recognises, including the protection of Indigenous peoples' rights. Section six analyses the mechanisms for the protection of these rights, participation and consultation, and the practice of the ILO monitoring bodies, especially the integration of impact studies with consultations and the incorporation and role of TK in assessing potential threats. This section also deals with the important question of FPIC (where we can find the PP as a requirement of 'informed consent'); its conception in terms of 'veto power' that would allow Indigenous peoples to cancel projects; and how the C169 minimises its role in the protection of Indigenous peoples' rights, creating some uncertainties. Section 7 provides an assessment of C169 and the chapter concludes in section 8 with some concluding remarks.

2. A general view of the Conventions

Since the end of the Second World War the international community has been promoting and strengthening human rights; as a result, the development of human rights norms has greatly progressed from the time of the UN Charter[6] and the Universal Declaration of Human Rights,[7] with several human rights instruments,[8]

[6] United Nations, "Charter of the United Nations", 24 October 1945, 1UNTSXVI.
[7] UNGA, "Universal Declaration of Human Rights", 10 December 1948, 217A(III).
[8] Treaties like the ICCPR or C169 and declarations such as UNDRIP, among others.

international courts[9] and monitoring bodies[10] that deal with these issues, and the recognition of some of these rights as customary law[11] or general principles.[12] The core of the human right system is the UNTS, composed of nine treaties[13] with an almost universal character,[14] which elaborates standards and procedures in human rights issues. Of these treaties, three have more often addressed Indigenous issues, influencing the development of Indigenous rights:[15] the ICCPR,[16] the ICESCR[17] and the ICERD,[18] and their monitoring bodies: the Human Rights Committee ('HRC'),[19] the Committee on Economic, Social and Cultural Rights ('CESCR');[20] and the Committee on the Elimination of Racial Discrimination ('CERD'),[21] respectively.

[9] Such as the Inter-American Court of Human Rights ('IACtHR').
[10] Several UN treaties have established their own monitoring bodies; for a complete list, see the UN Human Rights Office ('OHCHR') webpage at http://www.ohchr.org/EN/HRBodies/Pages/TreatyBodies.aspx [accessed May 2020].
[11] For instance, the International Court of Justice ('ICJ') stated that customary international law prohibits genocide. ICJ, "Reservations to the Convention on Genocide, Advisory Opinion" ICJ Reports 19-51, p. 15, p 23.
[12] B. Lepard, "International law and human rights" in T. Cushman (ed), *Handbook of Human Rights* (Routledge, 2012), p 589.
[13] These are the ICCPR; the ICESCR; the ICERD; the Convention on the Elimination of All Forms of Discrimination Against Women; the Convention on the Rights of the Child; the Convention on the Rights of Persons with Disabilities; the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment; the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families; and the International Convention for the Protection of All Persons from Enforced Disappearance. See also OHCHR, "Strengthening the United Nations Human Rights Treaty Body System: A report" by the UN High Commissioner for Human Rights, N. Pillay, 26 June 2012, A/66/860 ('OHCHR Report 2012'), pp 15-16; I. Bantekas and L. Oete, *International Human Rights, Law and Practice* (CUP, 2013), p 184; and S. Egan, *The UN Human Rights Treaty System: Law and Procedure* (Bloomsbury, 2011), p 3.
[14] For instance, the ICCPR has 173 State parties and its purpose is to be applied to every person, according to the Preamble; the ICESCR and ICERD have 171 and 182 State parties respectively.
[15] J. Anaya, *Indigenous peoples in International Law* (2nd edition, 2004), p 228; B. Saul, *Indigenous peoples and Human Rights: International and Regional Jurisprudence* (Bloomsbury 2016), pp 54 and 84.
[16] Being "the most comprehensive and well-established UN treaty on civil and political rights". S. Joseph and M. Castan, *The International Covenant on Civil and Political Rights: Case, Materials and Commentary* (OUP 2013, 3rd edition), p 8.
[17] Considered the "most important reference point for economic, social and cultural rights in the field." Egan (n 13), p 77.
[18] Representing "the most comprehensive and unambiguous codification in treaty form of the idea of the equality of races." E. Schwelb, "The International Convention on the Elimination of All Forms of Racial Discrimination", International and Comparative Law Quarterly, Vol.15, No.4(1966), p 1057.
[19] Established by ICCPR Article 28 and regarded as "the most prominent body among the treaty bodies". Bantekas and Oete (n 13), p 184.
[20] Established by the Economic and Social Council ('ECOSOC') Resolution 1985/17 of 27 of May 1985.
[21] Established by the ICERD in Part II.

Their role is to supervise the implementation of the treaty obligations,[22] and for this they:

-elaborate general comments, providing an authoritative interpretation of the respective treaty,[23] clarifying the meaning of its articles[24] and contributing to the development of treaty obligations;[25]

-examine State's reports about the compliance with the respective covenant, issuing concluding observations[26] that serve as guidance for the implementation of the conventions;[27] and

-analyse individual,[28] group[29] or inter-state[30] complaints concerning violations of the rights of the covenants, at the end of which they adopt 'views' (not judgments, since they are not judicial bodies).[31]

Despite this, none of the comments, concluding observations or views have a legally binding character and they may be viewed as soft law.[32] This does not mean

[22] Egan, (n 13), p 3, also mentioning that the system was not designed like this and just informally evolved as a de facto system. S. Egan, "Strengthening the United Nations Human Rights Treaty Body System", HRLR13(2013), p 211.

[23] A. Boyle and C. Chinkin *The Making of International Law* (OUP 2007), p 155; Egan (n 13), p 85 and 90; Y. Tyagi: The *UN Human Rights Committee, practice and procedure* (CUP 2011), p 302; V. Krsticevic and B. Griffey "Remedial Recommendations" in M. Langford, B. Porter, R. Brown and J. Rossi (eds), *The Optional Protocol to the International Covenant on Economic, Social and Cultural Rights: A Commentary* (PULP 2016), p 328.

[24] Civil and Political Rights: The Human Rights Committee Fact Sheet No. 15(Rev.1)('HRC factsheet'), pp. 24-25 and ICCPR Article 40(4). See also Egan (n 13), p 77; M. Ssenyonjo, *Economic, Social and Cultural Rights in International Law* (Bloomsbury, 2nd Edition 2016), p 42; and ICERD Article 9.2; P. Thornberry, *The International Convention on the Elimination of All Forms of Racial Discrimination: A Commentary* (OUP 2016) pp 53-55.

[25] C. Chinkin, "Sources of International Law" in D. Moeckli, S. Shah and S. Sivakumaran (eds), *International Human Rights Law* (OUP 2014, 2nd edition), p 80; Boyle and Chinkin (n 23), p 155; Ssenyonjo (n 24), p 42; Tyagi (n 23) pp 301-302; Thornberry (n 24), p 65, noting the role of the UN treaty bodies in developing standards that contribute to the formation of customary law.

[26] HRC Factsheet, pp 14-23 and ICCPR Article 40; ICESCR Articles 16 and 17; and ICERD Article 9. For an analysis of reporting procedures see Egan (n 13), Chapter 4 "Periodic Reporting Procedures" and the OHCHR Report 2012 (n 22).

[27] Tyagi (n 23), p 270; Egan (n 13) p 137-138 and 144; and Ssenyonjo (n 24), pp 44-45.

[28] HRC factsheet, pp. 25-27 and Article 1 of the Optional Protocol to the ICCPR, U.N.Doc.A/6316(1966), entered into force March 23, 1976 ('OP-ICCPR'); Article 2 Optional Protocol to the ICESCR, A/RES/63/117, 10 December 2008('OP-ICESCR'), p 309; ICERD Article 14.

[29] Ibid.

[30] HRC Factsheet, pp. 27-28 and ICCPR Articles 41-42; ICERD Articles 11-13. ICERD also has an 'Early warning and urgent action' procedure addressed below.

[31] See Egan (n 13), p 306 and Ssenyonjo (n 24), pp 40-41; Joseph and Castan, (n 16), p 22; Saul (n 15), p 2; see also HRC, General Comment 33, Obligations of States parties under the OP-ICCPR ('General comment 33')(25 June 2009)CCPR/C/GC/33, para. 11; Thornberry (n 24), p 61, noting that CERD makes 'suggestions and recommendations.'

[32] Boyle and Chinkin (n 23), p 156.

that they are deprived of any legal value; as noted in Chapter II, soft-law can play a very important role regarding *opinio iuris* (and possibly State practice);[33] moreover, even if the views are technically not legally binding, they constitute authoritative determinations which appear to all intents and purposes as written judicial opinions, providing detailed legal reasoning,[34] and indicating how to comply with legal obligations;[35] in this sense, disregarding them is evidence of bad faith.[36] Also, the comments, concluding observations and views work like a 'system': for instance, general comments enrich and expand human rights jurisprudence, being often cited in concluding observations and views,[37] and the consistent repetition of general comments/recommendations, concluding observations and views "creates a consensus that a lawyer would be foolish to ignore."[38] In this context, Egan highlights their important role in clarifying treaty obligations and providing guidance to States, instead of focusing on a 'strict compliance' approach,[39] where there is still some work to do.[40]

Generally speaking, in analysing States' compliance with human rights obligations, the bodies leave little space for the PP; for instance, the purpose of the individual complaint procedure is to provide *ex post facto* redress[41] to 'victims'[42] and not to avoid the materialization of harm, precautionary or otherwise. When threats of violations of rights are addressed, it is only when the author can substantiate its allegations,[43] demonstrating that the risk of being affected is 'imminent'[44] or 'real'[45]

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[33] See also A. Boyle, "Soft law in international law-making", in M. Evans (ed), *International Law* (4th ed, OUP 2014), p 130, pointing out that "widespread acceptance of soft law instruments will tend to legitimize conduct and make the legality of opposing positions harder to sustain."
[34] Egan (n 13), pp 253 and 262.
[35] Joseph and Castan (n 16), p 22.
[36] Ibid. See also Tyagi (n 23), pp 577-578, saying that HRC decisions are morally binding and can be regarded as "soft law applicable to the parties concerned", so disregarding them could be 'politically damaging'.
[37] Tyagi (n 23), p 301; Krsticevic and Griffey (n 23), p 328; Bantekas and Oete (n 13), p 199.
[38] Boyle and Chinkin (n 23), p 156.
[39] Egan (n 13) pp 171-172.
[40] Tyagi (n 23), pp 186-187; OHCHR Report 2012; Joseph and Castan (n 16), p 53; Bantekas and Oete (n 13) pp 182-183. Also, 116 States out of 173 adopted the OP-ICCPR; 25 out of 171 the OP-ICESCR; and 59 out of 182 ICERD's Article 14 (competence to receive communications).
[41] M. Kamminga, "The Precautionary Approach in International Human Rights Law: How It Can Benefit the Environment" in in D. Freestone and E. Hey (eds), *The Precautionary Principle and International Law: The Challenge of Implementation* (Kluwer, 1996), p 180.
[42] See OP-ICCPR Article 2; OP-ICESCR Articles 2 and 4; and ICERD Article 14(1), requiring the author of a communication to be a 'victim', i.e., suffered a violation of its rights.
[43] Like in every case at the admissibility stage. Tyagi (n 23), p 463.

("a necessary and foreseeable consequence", according to the HRC)[46] with the bodies disregarding 'theoretical possibilities of harm'[47] as they are unable to examine hypothetical violations of the Covenant which "might occur in the future".[48] Although this aligns with the existence of 'reasonable grounds for concern' (i.e., not mere intuitions or beliefs)[49] to trigger the PP, when allegations of potentially serious harm supported by credible evidence were raised (e.g., possible effects on the environment and human health from nuclear tests;[50] the risks posed by genetically modified crops[51]) they were declared inadmissible by the HRC because the authors were unable to establish their victim status, as the risk from nuclear tests was deemed too remote or controversial,[52] and the threat presented by GMOs was not imminent.[53] It seems that the bodies adopt a rather restrictive interpretation regarding future violations, requiring a standard closer to certainty (restricting the possibility of invoking the PP),[54] perhaps influenced by their constrains and limited fact-finding capacities that do not allow them to go beyond what is presented by the parties,[55] making it difficult to deal with uncertain and disputed effects.[56]

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[44] See for instance HRC: E.W. et al. v. The Netherlands, No.429/1990, para. 6.4; Mrs. Vaihere Bordes and Mr. John Temeharo v. France, No.645/1995('Bordes and Temeharo') para. 5.5; and André Brun v. France, No. 1453/2006('Brun'), para. 6.3. See also CERD: The Jewish community of Oslo et al. v. Norway, No.30/2003, para. 7.3, where there was an imminent risk of racial discrimination.

[45] HRC: Kindler v. Canada, No.470/1991('Kindler') para. 13.2 and Toonen v Australia No.488/1992, para. 5.1, where the author demonstrated that the threat of enforcement and pervasive impact of a provision had affected him; CERD: Hermansen et al v Denmark, No.44/2009 para. 6.2, declared inadmissible because, inter alia, the authors did not demonstrate that they suffered a disadvantage or the measure in question had the potential to produce effects in the future. See also Thornberry (n 24), pp 60-61 and Egan (n 13), p 270 and 318-319.

[46] Kindler, para. 14.1. See also Joseph and Castan (n 16), p 91.

[47] HRC-Aumeeruddy-Cziffra et al v Mauritius, No.35/1978, para. 9.2.

[48] HRC-V.M.R.B. v. Canada, No.236/1987, para. 6.3, although in this case the author merely expressed 'fear' for its life in case of being deported.

[49] See chapter II section 3.2.

[50] Bordes and Temeharo paras. 2.3 and 4.1-4.4, presenting scientific evidence like studies and reports.

[51] Brun paras. 3.2-3.3, relying explicitly on the PP.

[52] C. Dommen, "Nuclear Testing Vaihere Bordes and John Temeharo v. France-Communication No. 645/1995." Review of European Community and International Environmental Law 6.1(1997), p 93, criticising that the HRC did not clarify what degree of risk would have resulted in a different outcome. See also Bordes and Temeharo, paras. 5.4-5.6, where the HRC seems to conflate 'imminent' and 'real'.

[53] Brun, para. 6.3.

[54] See Kamminga (n 41) p 180. This could affect complaints about climate change' effects on human rights because of the difficulty to prove precise causation. See Joseph and Castan (n 16), p 89

[55] During the procedure the bodies rely on information from both parties, distributing the burden. Article 3 OP-ICCPR and HRC rules of procedure rule 96.b; OP-ICESCR Article 3.2(e); CERD rules of procedure, rule 91.

[56] Kamminga (n 41), p 177; Thornberry (n 24), p 53. Tyagi (n 23), p 422, saying that the HRC has a conservative approach regarding future violations and allegations in abstracto because it is not its

The bodies can also adopt interim measures to guarantee the effectiveness of the complaint mechanism[57] when there are actions taken or threatened by a State that "would appear likely to cause irreparable harm"[58] to the author; this requires an early and urgent risk assessment of the situation with limited information available, paying particular attention to the irreversibility of the consequences that the author may suffer,[59] thus having a lower standard of proof than the one needed to prove a (potential) violation of rights.[60] The HRC is the only body to address interim measures to date, mostly in situations of direct risks to life (e.g., death sentences) and deportations/extraditions where there were risks of torture or similar violations.[61] Yet, when an interim measure of a precautionary character was requested by the authors (the suspension of nuclear tests until an independent commission ruled that there were no risks to the people and the environment), the HRC rejected it because there was no immediate danger,[62] despite being aware of the serious threats represented by nuclear weapons[63] and the scientific evidence presented by the authors.[64] Thus, despite the existence of reasonable grounds for concern that serious/irreversible harm may occur, the HRC relied on a restrictive interpretation of 'likely to cause irreparable harm', closer to clear and immediate danger, disregarding situations where the causal link is inconclusive.

In the reporting procedure, the focus is on a more general analysis of States' compliance with most (or all) of the rights of the respective convention and not an in-depth analysis of particular matters, with the bodies identifying and expressing

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function "to make a hypothetical assessment of what would have happened if a particular event had taken place nor is it feasible."

[57] V. Krsticevic and B. Griffey "Interim Measures" in Langford et al (n 23), p 294. Disregarding interim measures is a violation of the OP-ICCPR and good faith according to HRC-general comment 33, para. 19.

[58] HRC-general comment 33, para. 19. See also Krsticevic and Griffey (n 57), p 298, noting that they also apply on situations that are occurring.

[59] Kamminga (n 41), p 182; Tyagi (n 23), p 515. 'Irreparable damage' would be "the inability of the author to secure his rights, should there later be a finding of a violation of the Covenant on the merits", following the HRC's view in Stewart v. Canada, No. 538/1993, para. 7.7.

[60] Krsticevic and Griffey (n 57), pp 300-301, noting that CESCR has to base any requests for interim measures on a 'reasonable conviction' that there is, prima facie, a possibility of irreparable damage, based on a clear and credible factual narrative.

[61] See for instance J.D. v Denmark, No. 2204/2012; K.B. v Russian Federation, No. 2193/2012, among others. See also HRC-general comment 33 para. 19 and Kamminga (n 41), p 183.

[62] Bordes and Temeharo, para. 2.3; Dommen (n 52), pp 92-93.

[63] See HRC-General Comment No. 14: Article 6 (Right to Life) Nuclear Weapons and the Right to Life, 9 November 1984, noting that testing nuclear weapons is one of the "greatest threats to the right to life which confront mankind today". See also Bordes and Temeharo paras. 2.2 and 5.9;

[64] Bordes and Temeharo, paras. 2.2-2.3, based on several studies; Dommen (n 52), pp 92-93.

'concerns' for infringements, suggesting broad recommendations for redress and prevention.[65] This indicates a more 'preventive' approach, where cause-effect relationships regarding human right violations are foreseen or established. However, the broad nature of the recommendations allow for a degree of precaution, as they may help to avoid not only known/ongoing but also potential harms; for instance, the HRC recommended Israel in 2014 to end the blockade on the Gaza Strip and allow access to 'all basic and life-serving' goods and services to improve food, health, water and sanitation conditions (known effect);[66] this would have also probably avoided/mitigated the effects of future disease outbreaks[67] (uncertain effect). This general nature can extend to situations where the PP plays a more explicit role, like climate change[68] and the potentially serious threats on human rights caused by effects on biodiversity, floods, food security and extreme weather, among others[69] as addressed for instance by the CESCR.[70]

The CERD for its part, and exercising its 'preventative powers',[71] has an 'Early Warning and Urgent Action' procedure ('EWUA') designed to "prevent serious violations" of ICERD derived from structural problems escalating into conflicts ('early warning') and "respond to problems requiring immediate attention to prevent or limit serious violations" of ICERD ('urgent action').[72] To achieve this, it must assess the gravity and scale of a particular situation, for which relies on indicators,[73]

[65] See for instance HRC-concluding observation Romania, CCPR/C/ROU/CO/5(11 December 2017) paras. 27-28, expressing concerns for police brutality; CESCR-concluding observation Korea, E/C.12/KOR/CO/4(19 October 2017), paras. 38-39 expressing concerns about restrictions on the right to strike; and CERD-concluding observation Slovakia, CERD/C/SVK/CO/11-12(12 January 2018) paras. 13-14, expressing concerns about hate speech in the media.

[66] HRC-concluding observation Israel, CCPR/C/ISR/CO/4(21 November 2014) paras. 19-20.

[67] See the UN Office for the Coordination of Humanitarian Affairs in the occupied Palestinian territory, Monthly Humanitarian Bulletin, March 2017, reporting an outbreak of animal disease worsened by the blockade.

[68] The PP is explicitly included in Article 3.3 of the UN Framework Convention on Climate Change.

[69] V. Tauli-Corpuz, "Report of the Special Rapporteur on the rights of indigenous peoples", 1 November 2017, A/HRC/36/46, para. 6.

[70] See for instance, CESCR-concluding observation Australia, E/C.12/AUS/CO/4(12 June 2009) para. 27. See also M. Orellana, M. Kothari and S. Chaudhry, "Climate Change in the Work of the Committee on Economic, Social and Cultural Rights", Geneva Office of the Friedrich-Ebert-Stiftung (May 2010), p 30.

[71] S. Subedi, *The Effectiveness of the UN Human Rights System: Reform and the Judicialisation of Human Rights*, Routledge (2017), p 86.

[72] Prevention of racial discrimination, including early warning and urgent procedures: working paper adopted by the CERD, A/48/18 Annex III para. 8. The procedure is based on art 9.1(b) of ICERD granting CERD the power to request a report at any time.

[73] Ibid, para. 12

like the existence of patterns of racial discrimination, the adoption of discriminatory legislation/policies and the encroachment on or forced removal from Indigenous lands,[74] which can lead to measures like requesting information, adopting decisions or issue recommendations.[75] This also seems to be a more preventive mechanism, because preventing structural problems from escalating implies a known cause-effect relation that is worsening; however, when acting in an urgent context it is reasonable to expect a degree of uncertainty, due to lack of information, resulting in precautionary measures. For instance, in a letter addressed to Japan, the CERD expressed its concerns over the proposed construction of US military bases in Okinawa, regarding potentially serious environmental harm and social consequences.[76] In other words, due to its broad nature that reaches a wide range of scenarios, this procedure could address situations where there is scientific uncertainty about potentially serious effects; however, it seems more oriented to preventive cases where there is a more direct and clear cause-effect link that results in violations of human rights.

In sum, there is little indication that precaution plays a relevant role in general in the UNTS, although some avenues for the consideration of the PP in these procedures exist, not fully explored by the bodies; for this, it would be necessary a more flexible approach that goes beyond the focus on imminent or foreseeable effects. Yet, this flexibility may be present in cases related to Indigenous peoples' rights, as the bodies have recognised their special relationship with their lands and territories, having a more organic connection to environmental aspects, where the PP has been mostly developed.

[74] Ibid.
[75] Report of the Committee on the Elimination of Racial Discrimination Seventieth session (19 February-9 March 2007) Seventy-first session (30 July-17 August 2007)A/62/18 Annex III Guidelines for the Early Warning and Urgent Action Procedure, paras. 13-14.
[76] Letter of March 9, 2012, sent by the CERD Chairperson to the Japanese Ambassador in Geneva. See J. Taylor, "Environment and Security Conflicts: The US Military in Okinawa" Geographical Bulletin 48:3-13(2007), detailing the possible impacts on the environment, including deforestation, local fauna and coral reefs as well as social effects.

3. Indigenous peoples in the Conventions

Most of the human rights treaties do not mention Indigenous peoples,[77] including the ICCPR, ICESCR and ICERD; yet Indigenous peoples have often relied on them to protect their rights,[78] leading to the reinterpretation of the respective treaties to address these issues. For instance, the HRC refers specifically to Indigenous peoples in the General Comment about Article 27,[79] rights of minorities'[80] to culture,[81] religion and language (although 'Indigenous peoples' and 'minorities' are not the same);[82] CESCR refers to Indigenous peoples in different comments,[83] being the most important in this context General Comment 21, right to take part in cultural life;[84] finally, CERD elaborated a specific comment regarding Indigenous peoples,[85] having a broader perspective about Indigenous issues, beyond cultural rights.

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[77] Gomez notes that they have been systematically excluded from the evolutionary process of international human rights law. F. Gomez, "The Role of Soft Law in the Progressive Development of Indigenous Peoples' Rights" in S. Lagoutte, T. Gammeltoft-Hansen and J. Cerone (eds), *Tracing the Role of Soft Law in Human Rights* (OUP 2016), p 185.

[78] See *supra* 15.

[79] See HRC, General Comment No. 23: Article 27(Rights of Minorities), 8 April 1994, CCPR/C/21/Rev.1/Add.5('HRC-General Comment 23').

[80] There is no internationally agreed definition of minorities; see, in general, F. Caportori, *Study on the Rights of Persons Belonging to Ethnic, Religious and Linguistic Minorities*, para. 568; OHCHR, "Minority Rights: International Standards and Guidance for Implementation", 2010, HR/PUB/10/3, p. 2 and M. Weller, *Universal Minority Rights*: *a commentary on the jurisprudence of international courts and treaty bodies* (OUP 2007).

[81] In general, the notion of cultural rights has a double meaning: as a concept related to high arts and literature, music and similar expressions of the human mind; and as knowledge, way of life, traditional activities, beliefs and practices of a group. The ICCPR appears to follow the latter whereas the ICESCR incorporates both. A. Yupsanis, "The Concept and categories of cultural rights in international law: their broad sense and the relevant clauses of the international human right treaties", 37SyracuseJ.Int'L.&Com. 207, p 211, and "The Meaning of 'Culture' in Article 15(1)(a) of the ICESCR – Positive Aspects of CESCR's General Comment No. 21 for the Safeguarding of Minority Cultures" German Yearbook Of International Law 55, 2012, pp 348-352.

[82] Indigenous peoples do not identify themselves as 'minorities' because they consider that this status does not adequately protect them, as noted in R. Wolfrum, "The Protection of Indigenous Peoples in International Law", 59 Heidelberg Journal of International Law (1999), p 371. Wiessner states that the definitive feature that separates Indigenous peoples from minorities is the collective spiritual relationship to their land. S. Wiessner, "The Cultural Rights of Indigenous Peoples: Achievements and Continuing Challenges", EJIL Vol.22no.1 (2011), p 129. See also "Mikmaq tribal society v. Canada", No. 78/1980 (30 September 1980)(1984)('Mikmaq'), para. 7.3, where the Mikmaq claimed to be a people, not a minority.

[83] For instance, CESCR, "General Comment No. 15, the right to water", 20 January 2003, E/C.12/2002/11.

[84] CESCR, "General comment No. 21: Right of everyone to take part in cultural life", 21 December 2009, E/C.12/GC/21('CESCR-General Comment 21').

[85] CERD, "General Recommendation 23, Rights of Indigenous peoples" U.N.Doc. A/52/18, annex V at 122(1997)('CERD-General Recommendation 23')

The HRC and the CESCR address Indigenous situations in several concluding observations, mainly under 'cultural rights' but also in connection with self-determination, whereas the CERD focuses on non-discrimination issues across their social, civil, political, economic and cultural aspects.[86] In the complaint procedure, the HRC (the only body that has addressed issues related to the focus of this research to date), tend to focus on the violation of cultural rights (see below), although Indigenous peoples often raised claims based on self-determination (article 1),[87] looking for the protection of their collective[88] rights.[89] This is because the HRC, despite its competence to review claims under "any of the rights set forth in the Covenant",[90] considers self-determination a right not cognizable under the protocol,[91] and that the complaint mechanism is only for individual victims.[92] Yet, as Indigenous peoples often seek the protection of their collective rights, the bodies adopted a more pragmatic approach, by which right to culture is interpreted as a 'way of life', entailing the protection of certain elements like the environment and TK, as I will mention below.

[86] Anaya notes that the CERD treats Indigenous issues as a non-discrimination issue, not connected to particular articles. Anaya (n 15), p 230; Saul (n 15), p 97.
[87] See Mikmaq; Lubicon Lake Band v. Canada, No.167/1984(26 March 1990)('Lubicon Lake Band'); Ivan Kitok v. Sweden, No.197/1985('Kitok'); Marshall v. Canada, No.205/l986('Marshall'); Apirana Mahuika et al. v. New Zealand No.547/1993('Apirana Mahuika'); J.G.A. Diergaardt et al. v. Namibia, No.760/1997('Diergaardt') and Poma Poma v. Peru, Comm. 1457/2006('Poma Poma').
[88] In the literature there are references to "collective rights" as well as "group rights"; following Sanders, the latter pertain to a group understood as the sum of the individuals (e.g., political parties) so a 'group right' would be at the same time an individual right, whereas 'collective rights' would be those that pertained to collectives with an internal cohesiveness, a particular cultural development and a goal of group survival (as opposed to assimilation). D. Sanders, "Collective Rights" 13 Hum.Rts.Q.368(1991), pp 369-370. See also J. Donnelly, "Universal Human Rights in Theory and Practice", Cornell University Press, Ithaca 1989, p. 145. I will use group and collective rights in an interchangeable way.
[89] See for instance, Mikmaq, para. 1, were the author alleges that he submits the communication on behalf of the Mikmaq 'people' and Lubicon Lake Band, para. 7, arguing that the 'victims' are the members of the Lubicon Lake Band.
[90] OP-ICCPR Article 1.
[91] See for instance Lubicon Lake Band, para. 32.1; Diergaardt, para. 10.3; and Poma Poma, para. 6.3.
[92] OP-ICCPR Articles 1-2, expressly mentioning that the HRC can receive and consider communications from 'individuals'.

3.1 Self-determination

There is no clear, universal understanding of self-determination in international law; [93] for instance, the UNGA just acknowledges that by virtue of self-determination, peoples are able to "freely determine, without external interference, their political status and freely pursue their economic, social and cultural development";[94] the ICCPR and ICESCR repeats this almost verbatim (minus the 'without external interference' part);[95] the HRC General Comment on Article 1 considers this as an "inalienable right"[96] and CERD's General Recommendation 21 notes that self-determination is a fundamental principle of international law.[97]

In general, self-determination has a double aspect: [98] an external one concerning the status of a State in respect to the international community, and an internal one related to the relations inside the State. The former implies that "peoples have the right to determine freely their political status and their place in the international community based upon the principle of equal rights"[99] and it is closely related, but not limited to, issues concerning States' independence.[100] The internal aspect is constituted by "the rights of all peoples to pursue freely their economic, social and cultural development without outside interference",[101] in turn linked to the right to take part in the conduct of public affairs at any level, as they are determined through political processes.[102] In this sense, McCorquodale explains that internal

[93] M. Saul, "The Normative Status of Self-Determination in International Law: A Formula for Uncertainty in the Scope and Content of the Right?", p 611.
[94] 1970 Declaration on Principles of International Law Concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations, GA Res.2625/UN GAOR, 25th Sess., Supp. No.28/UN Doc.A/8028(1970)121, ('Declaration concerning Friendly Relations').
[95] ICCPR and ICESCR Article 1.1.
[96] HRC, General Comment No. 12: Article 1, The Right to Self-determination of Peoples, 13 March 1984 ('HRC-General Comment 12'), which has no mentions of Indigenous peoples or minorities.
[97] CERD, "General Recommendation 21 The right to self-determination" (Forty-eighth session, 1996), ('CERD-General Recommendation 21), para. 2.
[98] See ibid and A. Xanthaki, *Indigenous Rights and United Nations Standards* (CUP, 2007), p. 159; R. McCorquodale, "Group Rights" in Moeckli et al (n 25), p 342 and A. Cassese, *Self-determination of peoples: a legal reappraisal* (CUP, 1995).
[99] CERD-General Recommendation 21, para. 3.
[100] The external aspect includes the creation of an independent and sovereign State, free association with another State or any other political status as freely determined by a people. Xanthaki (n 98), p 159; McCorquodale (n 98), p 341 and Declaration concerning Friendly Relations.
[101] CERD-General Recommendation 21, para. 4; see also Declaration concerning Friendly Relations and Article 1 of the ICCPR and ICESCR.
[102] Xanthaki (n 98), pp 157-158; CERD-General Recommendation 21, para. 3.

self-determination "concerns the right of peoples within a State to choose their political status, the extent of their political participation and the form of their government" and that its exercise may include control over social and cultural matters,[103] meanwhile Cassese considers that this internal aspect is "best explained as a manifestation of the totality of rights embodied in the Covenant [ICCPR]".[104] Thus, internal self-determination covers a collective approach to cultural, social and economic development and political participation.

There is a long controversy regarding Indigenous peoples' right to self-determination, which recognition has been resisted by States mainly because of the possibility of undermining their territorial integrity.[105] It appears however that States have mostly accepted Indigenous internal self-determination [106] (this being the approach followed by the bodies), [107] although the secession/independence controversy, which is beyond the scope of this work, remains unclear.[108] In any case, as noted above, the HRC does not address claims under Article 1, a refusal that Saul considers as an artificially strict construction of self-determination as 'exclusively collective',[109] which is the next topic.

[103] McCorquodale "Self-determination: A Human Rights approach" 43Int'l&Comp.L.Q.857 1994, p 864.
[104] Cassese (n 98), p. 53. See also HRC-General Comment 12 paras. 1 and 2, noting how self-determination is interrelated with other ICCPR rights and is an "essential condition for the effective guarantee and observance of individual human rights."
[105] See G. Nettheim, "'Peoples' and 'Populations': Indigenous Peoples and the Rights of Peoples" in J. Crawford (ed), *The Rights of Peoples* (OUP 1988); C. Charters, "Indigenous Peoples and International Law and Policy" in B. Richardson, S. Imai and K. McNeil (eds), *Indigenous Peoples and the Law: Comparative and Critical Perspectives* (Hart Publishing, 2009).
[106] Ward concludes that a modem concept of self-determination does not necessarily include the right to separate from a State, but instead alternatives like the right to participate in the conduct of public affairs and various forms of autonomy and self-governance. T. Ward, "The Right to Free, Prior, and Informed Consent: Indigenous Peoples' Participation Rights within International Law" 10 Nw.U.J.Int'l Hum.Rts.54 2011-2012, p. 55; Saul (n 15), p 55; J. Anaya, "Report of the Expert Mechanism on the Rights of Indigenous Peoples" A/HRC/EMRIP/2010/2, 17 May 2010, paras. 30-33 and UNDRIP Articles 3 and 46.1.
[107] Saul (n 15), p 55.
[108] R. Barsh, "Indigenous Peoples" in D. Bodansky, J. Brunne and E. Hey, (eds) *The Oxford Handbook of International Environmental Law* (OUP, 2012), p 848, noting that the UN system has recognized an Indigenous' right to internal self-determination but the struggle for external self-determination continues; see also Anaya (n 15), p 185, noting that the endorsement of self-determination by States in UNDRIP is not an endorsement of the right of Indigenous peoples to form independent states, which is not an aspiration in most cases.
[109] Saul (n 15), p 59.

3.2 Collective rights

The original focus of the UNTS was the protection of the 'individual' rather than the communities within which they live and develop,[110] under the assumption that individual rights would protect group rights.[111] However, some collective rights cannot be protected by individual rights (like self-determination or land rights in the case of Indigenous peoples[112]) among other reasons because the protection of a group as a collective is different than the protection of the group as a sum of individuals.[113] Group rights are also needed for other purposes, like preserving ethnic minorities and overcome effects of past discrimination,[114] and it is undeniable that at least some collective rights enjoy solid recognition in international law, like self-determination and, to a certain extent, Indigenous peoples' rights.[115]

In the General Comment 23, the HRC explicitly refers to 'minorities' and their cultural rights as a whole, not only in an individual character,[116] and

[110] McCorquodale (n 98), p 333. Jovanovic explains that the recognition of universal but individual rights was due to the fact that the Nazis based their military conquests in the alleged violations of German minority rights in other countries. M. Jovanovic, "Are There Universal Collective Rights?" Hum Rights Rev (2010)11:17–44, p 32.

[111] M. Ahren, "The Provisions on Lands, Territories and Natural Resources in the UN Declaration on the Rights of Indigenous peoples: An Introduction" in C. Charters and R. Stavenhagen (eds), *Making the Declaration Work* (Copenhagen: IWGIA, 2009), p 201. Brownlie illustrates this arguing that if everyone has the right to freedom of thought, conscience and religion then the right of the members of a religious community would be adequately protected. I. Brownlie, "The Rights of Peoples in Modern International Law" in Crawford (n 105), p 2. See also Sanders (n 88), p 374.

[112] Due to the very deep relationship with their territories in a way that includes social, cultural economic, spiritual and political dimensions and a very significant collective character with an intergenerational element. See E. Daes, "Indigenous Peoples and Their Relationship to Land", E/CN.4/Sub.2/2001/21, 11 June 2001, para. 20, and Barsh, (n 108), p 836: saying that "there is little doubt that Indigenous peoples hold and exercise rights as groups."

[113] See P. Jones, "Individuals, communities and human rights", 26 Review of International Studies(2000) 199-215, using as an example the individual right to speak their own language; a ban on language would be an individual violation, but the claim of a minority to have the public affairs conducted in their own language would be a collective right, since "the combined claim of all of the individuals in the linguistic group that suffices to make the case for the right. Thus, the group as whole possesses a right that none of its members possesses individually."

[114] OHCHR Report 2012, p 8. In this respect, Alston notes that first and second generations rights, (civil and political and economic, social and cultural, respectively) were not flexible enough to respond to the new challenges in international law, and thus a third generation of human rights based on solidarity and collective identity was needed. P. Alston, "A Third Generation of Solidarity Rights: Progressive Development or Obfuscation of International Human Rights Law?" Netherlands International Law Review, 29(1982), pp 307-308.

[115] J. Crawford, "The Rights of Peoples: 'Peoples' or Governments'?" in Crawford (n 105), pp 57 and 67.

[116] HRC-General Comment 23, para. 5.2 and 9. See also A. Yupsanis, "Article 27 of the ICCPR Revisited-The Right to Culture as a Normative Source for Minority/Indigenous Participatory Claims in the Case Law of the Human Rights Committee", Hague Yearbook of International Law Vol

acknowledges that minorities' rights are exercised "in community with the other members of the group", thus depending on the survival of the group as such.[117] Additionally, in various Indigenous cases under the complaint procedure it has either 'transformed' the argument originally presented under Article 1 as a claim under 'cultural rights' (Article 27)[118] or stated that self-determination, a collective right, can be relevant in the interpretation of Article 27.[119] Finally, more recently it has explicitly stated that "in the context of indigenous peoples' rights, Articles 25 and 27 of the Covenant have a collective dimension",[120] in line with the CESCR's General Comment 21,[121] and the CERD's General Recommendation 23.[122] This leads to the analysis of Indigenous 'cultural rights'.

3.3 Cultural rights

The CERD, with its focus on combating racial discrimination, does not specify what cultural rights are, relying instead on its recognition by other instruments, like the Covenants;[123] for instance, ICERD guarantees the right of everyone "without distinction as to race, colour, or national or ethnic origin, to equality before the law, notably in the enjoyment" of several rights, including cultural rights.[124] The other two Covenants, however, expand the understanding of cultural rights through general comments. According to the HRC's General Comment 23, Indigenous cultural rights

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26(2013), p 368, noting that several authors argue that cultural rights have an inherent collective dimension. Steiner also highlights that "[g]roups and communities, not isolated individuals, transmit culture from one generation to the next" H. Steiner, "Ideals and Counter-Ideals in the Struggle over Autonomy Regimes for Minorities" 64 Notre Dame LR(1991), p 1549.

[117] HRC-General Comment 23 paras. 6.2 and 9. See also Joseph and Castan (n 16), p 833 noting that CESCR and CERD can review collective claims.

[118] See for instance Lubicon Lake Band para. 33.1 and Poma Poma, para. 6.3,

[119] Apirana Mahuika, para. 9.2; Diergaardt, para. 10.3;

[120] Tiina Sanila-Aikio v. Finland No 2668/2015, para. 6.9 and Klemetti Käkkäläjärvi et al v. Finland, No 2950/2017, paras. 9.8-9.9.

[121] CESCR-General Comment 21 para. 9, noting that cultural rights can be exercised as individuals, in association with others or within a community or group, and paras. 36-37 noting its collective character in regard to Indigenous peoples.

[122] CERD-General Recommendation 23, para. 4. See also P. Thornberry, *Indigenous Peoples and Human Rights"* (Manchester University Press, 2002), p 217.

[123] CERD, General Recommendation 20, "The guarantee of human rights free from racial discrimination" (Forty-eighth session, 1996), UN. Doc.A/51/18, annex VIII at 124(1996), para. 1.

[124] ICERD Article 5, in particular para.(e). It does highlight the existence of a special link between Indigenous peoples and their lands. CERD-General Recommendation 23, para. 5.

consist of a lifestyle inextricably associated with their lands,[125] with their customs, knowledge, traditions and development depending on and determined by the territories they inhabit; in this sense, adverse impacts on the latter can seriously affect the former, as argued in the complaint procedure[126] and noted in concluding observations.[127] The HRC notes that because of the diverse characteristics of the lands inhabited and the different lifestyles, it is practically impossible to determine what constitute Indigenous cultural rights *in abstracto,*[128] pointing out that "culture manifest in many forms, including a particular way of life associated with the use of land resources, especially in the case of Indigenous peoples",[129] but according to the HRC, this includes traditional activities (fishing and hunting [130] and alpaca farming,[131] among others); spiritual elements;[132] and economic developments (as "an essential element of the culture of an ethnic community"),[133] being as well a notion in constant evolution.[134] Holder notes that the HRC characterise 'cultural rights' as a right to do 'cultural things' or activities, which express and develop a worldview, a history and an identity as peoples and individuals, exercised through objects,

[125] HRC-General Comment 23, paras. 3.2 and 7; see also Lubicon Lake Band paras. 11.2 and 33, noting that the Band's 'way of life' includes spiritual and cultural ties to their land and environment; HRC-concluding observations: Finland, CCPR/CO/82/FIN(2 December 2004), para. 17; Colombia, CCPR/C/COL/CO/7(17 November 2016) paras. 42-43; and J. Anaya and R. Williams, Jr., "The Protection of Indigenous Peoples' Rights over Lands and Natural Resources under the Inter-American Human Rights System, 14 HARV.HUM.RTS.J.33, p 53, noting that "under international law, the [S]tates' obligation to protect Indigenous peoples' right to cultural integrity necessarily includes the obligation to protect traditional lands because of the inextricable link between land and culture in this context."

[126] See for instance, Lubicon Lake Band (destruction of the Indigenous lands by oil and gas companies); and Poma Poma below.

[127] HRC-concluding observations: Chile CCPR/C/CHL/CO/5(18 May 2007), para. 19, noting that ancestral lands are threatened by energy developments; United States of America('USA') CCPR/C/USA/CO/4(23 April 2014) para. 25, and Russia CCPR/C/RUS/CO/7(28 April 2015) para. 24, noting that Indigenous sacred areas are being contaminated and destroyed.

[128] HRC-General Comment 23 para. 7; see also Kitok para. 9.3; Länsman et al. v. Finland No 511/1992 ('Länsman I') para. 9.3 and Apirana Mahuika para. 9.4.

[129] HRC-general comment 23 para. 7.

[130] Ibid.

[131] Poma Poma para. 7.3

[132] See for instance Apirana Mahuika, considering the religious, cultural and commercial significance of fishing for the Maories (paras. 9.8-9.9); see also HRC-concluding observations USA 2014 para. 25 and Russia 2015 para. 24.

[133] See Kitok para. 9.2; Länsman 1 para. 9.2 and Apirana Mahuika para. 9.3, among others.

[134] Yupsanis (n 116), p 373, and HRC-General Comment 23, para. 9, noting that that the protection of cultural rights "is directed towards ensuring the survival and *continued development* of the cultural, religious and social identity of the minorities concerned" [emphasis added]. See also Länsman I para. 9.3.

behaviours, languages and institutions.[135] 'Culture' then is what people do when they live their lives as peoples, constituting an essential part of being human.[136] Being TK a manifestation of a way of life that contributes to the development of a communal identity as peoples,[137] it is also included here.

The CESCR also recognises culture as a way of life, going into more detail about the different 'cultural things' by which individuals and communities express their humanity and represent their worldviews, such as language; music; religion or belief systems; ceremonies; natural and man-made environments; arts; and customs and traditions, among others.[138] In the case of Indigenous peoples, and considering their special relationship with their lands and territories, these expressions also include their cultural heritage; TK and cultural expressions; and manifestations of their sciences, technologies and cultures (such as genetic resources, seeds, medicines, knowledge of the properties of flora and fauna and traditions, among others).[139] Like the HRC, the CESCR consider 'cultural rights' "as a living process, historical, dynamic and evolving, with a past, a present and a future".[140]

These cultural rights constitute a vital part of the Indigenous identity, so affecting any of its elements, including their environment, may threaten their survival.[141] In this context, the HRC stated that cultural rights "may require positive legal measures of protection and measures to ensure the effective participation" of minorities in decisions that could affect them, a protection "directed to ensuring the survival and continued development of the cultural, religious and social identity of the minorities concerned".[142] This leads to two important implications: first, as noted by the HRC, this protection is not absolute and States could affect Indigenous interests when taking legitimate steps to promote their economic development

[135] C. Holder, "Culture as an Activity and Human Right: An Important Advance for Indigenous Peoples and International Law" Alternatives: Global, Local, Political, Vol. 33, No 1(2008), p 15. Yupsanis (n 116), pp 370-371.
[136] Holder (n 134), p 22; Yupsanis (n 116), p 371
[137] See Chapter III, section 4.
[138] CESCR-General Comment 21, para. 13.
[139] Ibid., paras. 27, 36-37, 49 (d) and 50 (c).
[140] Ibid., para. 11.
[141] HRC-General Comment 23, para. 9 and Poma Poma, para. 7.2. See also HRC-concluding observation Finland 2004 para. 17, noting how endangering their traditional culture and way of life also endangers their identity.
[142] HRC-General Comment 23, paras. 7 and 9.

(including natural resources),[143] but this economic development cannot undermine cultural rights to the point that the restrictions imposed constitute a denial of this right.[144] Second, as highlighted by Holder, the protection of cultural rights can "ground rights to conditions, objects, or goods that are instrumentally necessary for a people's culture",[145] like the environment in the case of Indigenous peoples, as also noted by the CESCR, pointing out that their relationship with nature and their ancestral lands should be protected "in order to prevent the degradation of their particular way of life(…) and their cultural identity."[146] Now, if the protection of Indigenous peoples' cultural rights entails the protection of values and elements that are necessary for the development and sustainability of their culture, and especially considering that the basis of their traditional livelihood is their environment, it could be argued that the existence of potential threats to these values requires the application of the PP, and thus States would have a duty to avoid the materialisation of potential impacts to their culture, also considering that because cultural rights cannot be determined *in abstracto*, there is a degree of uncertainty about what are these rights and how are they going to be affected. As I analyse below, there are some recent indications that the monitoring bodies are aware of the need to avoid the materialisation of potential threats of non-negligible harm to Indigenous peoples' traditional livelihood and cultural rights, but the practice is inconsistent in this respect, especially regarding FPIC and if impact assessments form part of 'effective participation'.

3.3.1 The protection of cultural rights

As noted by the HRC, the protection of cultural rights requires Indigenous peoples' effective participation in decisions that could affect them,[147] enabling them

[143] Länsman I, para. 9.4; Apirana Mahuika, para. 9.4; and Poma Poma, para. 7.4.
[144] Ibid.
[145] Holder (n 134), p 10.
[146] CESCR-General Comment 21 para. 36, and CESCR-concluding observations: Ecuador E/C.12/1/Add.100(07 June 2004) para. 12, noting how the environmental impacts of the extraction of natural resources affect their cultural rights; and Chad, E/C.12/TCD/CO/3(16 December 2009) para. 35, noting that exploitation of natural resources affects their livelihood and cultural identity, among others.
[147] HRC-general comment 23, paras. 7 and 9; CESCR-General Comment 21, para. 55(e); and CERD-General Recommendation 23 para. 4(e). See also Yupsanis (n 116), p 371.

to use their knowledge and experiences to reduce uncertainties and raise awareness about possible risks that threaten particular conditions, objects or goods necessary to express their culture, including their environment and spiritual aspects associated to their lands. For example, in Länsman I, where Finland granted a contract to a private company to allow stone quarrying in an area home to a Saami community, the HRC recognised the value of reindeer husbandry and the spiritual significance of a mountain as an important part of the community's culture.[148] Yet, the General Comment does not clarify what constitutes 'effective participation', for which it is necessary to analyse the bodies' practice, starting with the HRC's complaint procedure.

a) Complaint procedure

In analysing claims under Article 27, the HRC focuses on damages caused to Indigenous lands, a vital element for Indigenous culture, assessing if these damages effectively deny the enjoyment of cultural rights and way of life;[149] if they do, there is an incompatibility with Article 27,[150] but if the impacts are more limited, they do not infringe this Article.[151] In doing so, the HRC relies information provided by the parties (including TK), to determine what are these cultural rights and how they could be affected, especially looking at if the authors participated in the decision-making process, and if they can continue with their traditional activities.[152] Following this, in several cases the HRC found no violation of Article 27 because Indigenous authors were *consulted* and their interests and concerns taken into account, resulting in changes to accommodate these concerns. For instance, in

[148] Länsman I paras. 9.2-9.3.
[149] See for instance, Länsman I para. 9.5: "[t]he question that therefore arises (…) is whether the impact of the quarrying on Mount Riutusvaara is so substantial that it does effectively deny to the authors the right to enjoy their cultural rights"; a similar analysis can be found in Länsman II (para. 10.4) and Äärela (para. 7.5), regarding logging activities.
[150] See Lubicon Lake Band, para. 33 in connection with paras. 11.2 and 29.1, where non-Indigenous exploitation of natural resources in their territories destructed their lands and threatened the Band's way of living; and Poma Poma, para. 7.4.
[151] For instance, Länsman I, para. 9.4 and Apirana Mahuika, para. 9.4.
[152] Apirana Mahuika para. 9.5: "the Committee has emphasised that the acceptability of measures that affect or interfere with the culturally significant economic activities of a minority depends on whether the members of the minority in question have had the opportunity to participate in the decision-making process in relation to these measures and whether they will continue to benefit from their traditional economy"; see also, Länsman I para. 9.5 and Länsman II para. 10.4.

Länsman I, Finland authorised quarrying activities with limited environmental and cultural impacts on the Saami livelihood, that would not affect reindeer herding activities;[153] in Länsman II, the HRC noted that approval of logging plans by Finland in an area home to a community of Saami reindeer breeders did not threaten the survival of reindeer husbandry, as the State modified the original plans to limit environmental impacts (reducing logging areas and changing to manual methods) after consultations with the authors;[154] and in Apirana Mahuika, the HRC highlighted that an agreement between the Maori and New Zealand was influenced by a lengthy consultation process, integrating their economic, cultural and religious concerns (in particular, the sustainability of the Maori fishing activities), preserving their traditions.[155] All this consistently indicates that 'effective participation' means 'consultations', enabling the integration of TK to clarify effects on cultural rights; yet, the HRC has not mentioned particular requirements, resulting in allegations about 'proforma' consultations and violations of Indigenous' rights against States, dismissed by the HRC, possibly because their concerns were at least partially taken into account.[156]

It seems that the protection of cultural rights recognised by the HRC only extends to situations where the cause-effect relation was clear (e.g., the exclusion of certain areas from the original plans); in effect, when concerns about potential impacts from future activities were raised by Indigenous peoples, the HRC disregarded them, noting in both Länsman cases that only if the projected activities (possible expansion of mining and quarrying operations, in Länsman I; future mining and logging activities in the area for which licences were already granted and their possible cumulative impacts, in Länsman II) were to be approved on a larger scale or it could be shown that the effects are more serious than can be "foreseen at present", then the HRC may have to consider if they constitute a violation of Article 27.[157] Likewise, in Äärela, and faced with contradicting domestic judgments regarding

[153] Länsman I paras. 9.6-9-7
[154] Länsman II paras. 6.1, 6.13, 10.5 and 10.6.
[155] Apirana Mahuika paras. 9.5-9.8.
[156] See Länsman II, paras. 7.8 and 10.5, where the HRC noted "[t]hat this consultation process was unsatisfactory to the authors and was capable of greater interaction does not alter the Committee's assessment" and Apirana Mahuika paras. 9.6 and 9.8 where the HRC gave more weight to the fact that consultations were conducted, disregarding claims of lack of sufficient support for the agreement.
[157] Länsman I paras. 8.7-8.8 and 9.8; Länsman II, paras. 2.6, 7.11, 7.15 and 10.7.

potential long-term impacts of a logging area that the authors contended was important to the survival of the herd in emergency situations, the HRC was unable to "draw independent conclusions" about this controversy and the possible consequences on reindeer husbandry, thus finding no violation of Article 27.[158] In regard to interim measures, the question of precaution is open because they were discussed in situations of ongoing[159] or clear and immediate[160] damages, in line with the restrictive interpretation of 'likely to cause irreparable harm' noted above.

Although in Länsman I the concerns about potential impacts seemed too general and hypothetical (unspecified possible effects from possible future operations), in Länsman II and Äärela there was clear evidence of reasonable grounds for concern that potentially serious harm could occur, supported by the authors' TK and practices (and disputed by States), meeting the precautionary standard of proof. In effect, in both cases it was argued that, based on previous experiences and observations, and considering that regular feeding grounds were already under pressure from various projects, the logging operations may in the long-term affect emergency feeding grounds (lichen growing on trees), necessary in the case of unpredictable situations like crisis or difficult winters (where reindeers may be unable to dig lichen from the frozen ground), threatening the survival of reindeer herds.[161] However, the HRC did not follow a precautionary approach, despite the fact that these credible potential risks would not simply affect the enjoyment of their cultural rights, but jeopardize the very existence of their traditional way of life.

As the HRC gives great importance to the inclusion of Indigenous concerns and knowledge through effective participation/consultations (even highlighting its role in modifying projects, preventing harm), it seems that the lack of precautionary guidance is not grounded on questions of TK as a credible source of evidence of potential harm and uncertainties, but on the rather restrictive standards followed by the HRC, requiring 'imminent' or 'foreseeable' risks before addressing claims of potential violations of rights, as noted above. That being said, a more recent case

[158] Äärela, para. 7.6.
[159] See Lubicon Lake Band, where oil and gas companies were destroying the Band's lands (granted).
[160] See for instance, Sara et al, effects on reindeer herding and breeding due to logging, granted then discontinued due to inadmissibility issues; Länsman I, attempting to prevent imminent quarrying, not granted because quarrying was halted; and Länsman II, logging activities affecting lichen areas where the animal fed, granted but then revoked because the State showed that there were not needed.
[161] Länsman II paras. 2.6, 7.1-7.3, 7.11 and 7.15; Äärela, paras 2.2 and 5.3.

could indicate a different approach, despite the fact that this issue of potential harm was not raised. In Poma Poma, the Peruvian government diverted groundwater from the land of an Aymara community without consulting them, destroying their ecosystem and leading to the death of livestock, the abandonment of their land and the substantial disruption of the community's traditional livelihood and identity, in violation of Article 27.[162] In my view, and considering that in hindsight it is easier to identify cause-effects links and overlook potential risks that perhaps did not occur (causing a bias toward prevention), this was a situation where there was a threat of non-negligible harm (which materialised), and a government proceeding in a context of scientific uncertainty and controversy, without the best information available about possible substantive and existential impacts on the community's livelihood, despite credible evidence presented in domestic proceedings.[163] There was also inadequate information about cultural and environmental impacts, with Peru conducting only a non-independent EIA without Aymara's participation, wrongly concluding that "the foreseeable overall environmental impact was moderate" and that the amount of water to be withdrawn was less than the calculated renewable reserves.[164] In this context, the HRC especially underscored that the absence of both a proper EIA to determine possible impacts and consultations contributed to the substantive effects on the environment and the author's culture,[165] unforeseen by the State.

The explicit reference to EIAs is important because they provide a reasoned and 'reasonable assessment' of both foreseeable threats and possible risks of an activity when there are scientific uncertainties,[166] normally constituting "'the best information available' that gives rise to reasonable grounds for concern" about potentially serious/irreversible environmental harm,[167] thus giving decision-makers a stronger basis to move forward with a measure or adopt precautionary actions.

[162] Poma Poma, paras. 2.2-2.3, 3.1 and 7.7. See also K. Göcke "The Case of Angela Poma Poma v Peru before the Human Rights Committee", Max Planck Yearbook Vol 14 (2010), pp 341-343.
[163] Poma Poma, paras. 2.4-2.13.
[164] Ibid., para. 2.6.
[165] Ibid., para. 7.7.
[166] Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, ICJ Reports 2010, p. 14 ('Pulp Mills'), Separate Opinion of Judge Cançado Trindade, para. 96; N. De Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules* (OUP, 2002), p 207.
[167] A. Trouwborst, *Precautionary Rights and Duties of States* (Martinus Nijhoff, 2006), p 175, A. Cançado Trindade "Principle 15: Precaution" in J. Viñuales (ed), *The Rio Declaration on Environment and Development*: *A Commentary* (OUP, 2015), p 424.

Considering this, the emphasis on EIAs suggests an implicit recognition that cultural rights are subject to precautionary treatment, indicating that States must act before the risk is 'imminent' or 'foreseeable'. Similarly, and albeit without mentioning the PP, Pentassuglia considers that this reference may indicate a 'wider approach', by which the HRC would include EIAs "to articulate the test of effective participation" under Article 27.[168] If this is the case, States would have to conduct both EIAs (arguably with Indigenous participation, considering the importance given to TK by the HRC) and consultations, complementing each other[169] and allowing them to obtain the best information available regarding cultural rights and possible effects on Indigenous peoples' way of life and environment.

Another important question addressed in Poma Poma is consent; in effect, being a case where the consequences for the authors were 'substantive', destroying their livelihood and the relationship with their territories[170] (going beyond the simple denial of the enjoyment of cultural rights), the HRC went further than previous cases, specifying that 'effective participation' requires not only consultation but FPIC,[171] although without elaborating on FPIC's meaning or referring to other legal sources.[172] Following this, several authors reject a literal interpretation that always requires FPIC, which would go beyond the scope of Article 27,[173] and it is not followed by the HRC in the reporting procedure (see below); Pentassuglia notes that arguably what the HRC really refers to is a 'sliding scale approach' by which the level of effective participation is determined by the impacts on the community's way

[168] G. Pentassuglia, "Towards a Jurisprudential Articulation of Indigenous Land Rights", EJIL, 2011, p 184.
[169] See for instance the former Special Rapporteur, noting that environmental (and social) impact studies are "essential" to identify consequences and impacts and "must be" presented at the early stages of consultations J. Anaya, "Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous Peoples, Extractive industries and Indigenous peoples", 1 July 2013, A/HRC/24/41 ('2013 Report'), para. 53. See also section 6 below.
[170] Poma Poma, para. 7.7.
[171] Ibid, para. 7.6. see also Yupsanis (n 116), pp 399-403 and M. Barelli, "Free, Prior and Informed Consent in the UNDRIP" in J. Hohmann and M. Weller (eds) *The UN Declaration on the Rights of Indigenous Peoples: A Commentary* (OUP 2018), p 259.
[172] Göcke (n 162), p 368 noting that this FPIC requirement is it is unclear what the HRC wanted to express when it included the FPIC criteria; Yupsanis (n 116), pp 395-396, criticising that the HRC has the obligation to clarify the parameters that make an effective participatory process. This was despite the fact that UNDRIP was already adopted and that Peru ratified C169. See also Pentassuglia (n 168), p 184 and Barelli (n 171), pp 259-260.
[173] Pentassuglia (n 168), p 184; Yupsanis (n 116), pp 402-403; Barelli (n 171), pp 259-260, among others.

of life,[174] a notion that seems to be present in the CESCR-General Comment 21, noting that States should obtain Indigenous peoples' FPIC "when *the preservation of their cultural resources*, especially those associated with their way of life and cultural expression, are at *risk*" [emphasis added][175] and, in my view, it would also follow a precautionary logic of 'the higher the risk the greater the need for precaution'.[176] If this is the case, this implies that FPIC would act as a 'heightened safeguard' applicable in situations where a proposed measure could cause substantive harm (foreseeable and potential).

However, at the time of writing this issue of effective participation has not been subsequently addressed in the complaint procedure, so it is unclear if this actually constitutes a new standard to protect cultural rights, regarding both EIAs and FPIC. It is also unclear what is the criteria for considering when a certain measure constitute 'substantive harm',[177] making it difficult to determine if FPIC is applicable only to effects on Indigenous lands and territories or if it also extends to the spiritual values that could be affected (which would be beyond the scope of an EIA); for instance, there may be situations where proposed activities may not cause obvious disastrous environmental impacts, as happened in Poma Poma, but affect smaller areas which are of spiritual significance, potentially causing equally devastating effects on Indigenous peoples' cultural rights.

In sum, the protection of cultural rights in this procedure requires Indigenous peoples' consultations, which allow them to incorporate their concerns in decision-making, based on their TK and experiences; as such, it is instrumental in modifying projects and preventing foreseeable substantive environmental and cultural harm. When it comes to potential threats of harm, it seems that the HRC is not regularly guided the PP and generally disregard these claims; however, it may be moving toward a broader approach to effective participation, by which States would have to act before the potential harm is 'imminent' by conducting EIAs in conjunction with

[174] Pentassuglia (n 168), p 184 and see also G. Pentassuglia, Minority Groups and Judicial Discourse in International Law: A Comparative Perspective (Martinus Nijhoff 2009), p 116; Yupsanis (n 116), pp 402-403; Barelli (n 171), pp 259-260.
[175] CESCR-General Comment 21, para. 55 e).
[176] Kamminga (n 41), p 185.
[177] Yupsanis (n 116), p 408.

consultations, and where in situations of potentially substantive harm, FPIC would be required as a heightened safeguard. Much remains to be clarified, however, before being able to consider this as a strong approach to FPIC and the protection of cultural rights, including regarding spiritual values associated to their lands and environment.

b) Reporting procedure

Through this procedure, the bodies make a broad assessment of States' compliance with the respective convention, often expressing 'concerns' for infringements and making recommendations for redress and prevention of future violations. As it provides less details about particular issues than the complaint procedure, it is not an ideal way to clarify "the contours of critical legal questions";[178] however, it reflects a general understanding on how States should comply with treaty obligations.

When it comes to cultural rights, both the HRC and CESCR have a very similar approach; in effect, the ICCPR guidelines about Article 27 require States to provide information about measures taken to ensure that minorities can enjoy these rights and ensure their effective participation in decisions that affect them,[179] but like in the HRC-General Comment 23, it does not specifies what constitutes 'effective participation'. However, building upon the connection between Articles 27 and 1 (self-determination) noted above, Article 1 of the ICCPR guidelines instructs States to indicate "[t]he extent to which Indigenous and local communities are duly consulted, and whether their prior informed consent is sought in any decision-making processes affecting their rights and interests under the Covenant".[180] The same language is used by the CESCR Guidelines on Article 1,[181] being the one referring to

[178] Barelli (n 171), pp 259-260.
[179] ICCPR, "Guidelines for the treaty-specific document to be submitted by States parties under Article 40 of the International Covenant on Civil and Political Rights" ('ICCPR Guidelines')CCPR/C/2009/1(22 November 2010), Article 27.
[180] Ibid., Article 1. See for instance the following HRC-concluding observations recommending consultations: Peru CCPR/C/PER/CO/5(26 April 2013), para. 24; Bolivia, CCPR/C/BOL/CO/3(6 December 2013), para. 25; Chile CCPR/C/CHL/CO/6(13 August 2014) para. 10; Venezuela CCPR/C/VEN/CO/4(13 August 2015), para. 21; Colombia 2016, paras. 42-43; Honduras, CCPR/C/HND/CO/2(22 August 2017), para. 47; Australia CCPR/C/AUS/CO/6(1 December 2017), para. 50 and Norway CCPR/C/NOR/CO/7(25 April 2018), para. 36.
[181] CESCR, "Guidelines on treaty-specific documents to be submitted by States parties under Articles 16 and 17 of the International Covenant on Economic, Social and Cultural Rights" ('ICESCR Guidelines') E/C.12/2008/2, 24 March 2009, Article 1.

Article 15.1(a) more oriented to culture as 'high arts' (for instance asking States about measures adopted to promote broad participation in cultural events such as concerts).[182] Following this, both bodies consistently express 'concerns' for the absence of Indigenous consultations and the effects on Indigenous peoples' 'way of life', 'culturally significant economic activities' or a particular element of their culture, like their lands and territories, in a wide range of scenarios such as policy and legislation,[183] land rights,[184] and most of all, development projects and exploitation of natural resources,[185] and both in regard to cases of preventive/ongoing damages,[186] as well as where there 'may/might/would' be serious effects on Indigenous peoples' way of life.[187] This in my view suggests an awareness of situations in which States do not have full scientific certainty about potentially serious effects on Indigenous livelihood and environment; thus, like in the previous procedure, consultations would enable the incorporation of TK in the decision-making process and an Indigenous understanding of risks and uncertainties, identifying and determining possible impacts that may not be considered without this input, and the adoption of effective measures to avoid them. In this sense, in at least some concluding observations there seems to be an effort to address potential threats of harm; for instance, the HRC recommended Bolivia to consult Indigenous peoples (and obtain their FPIC) "before any measures are adopted that would substantially

[182] Ibidem, Article 15.

[183] HRC-concluding observations: Australia 2009 and Chile 2014, about establishing Indigenous representative bodies; Honduras 2017 and Australia 2017, about legislation that could impact their lands and rights. See also CESCR-concluding observations: Colombia, E/C.12/COL/CO/5(7 June 2010) paras. 12-13 and Australia 2017, paras. 15-16.

[184] HRC-concluding observations: Nicaragua, CCPR/C/NIC/CO/3(12 December 2008) para. 21 in the context of demarcation of lands; and Honduras 2017 paras. 46-47, forced evictions and reparations; CESCR-concluding observations: Cambodia, E/C.12/KHM/CO/1(12 June 2009), paras. 15-16, where mining and oil operations affected ancestral lands; and Sweden, E/C.12/SWE/CO/6, (14 July 2016) paras. 13-14, concerning obstacles to access ancestral lands.

[185] HRC-concluding observations: Bolivia 2013, para. 25; USA 2014 para. 25; Guatemala, CCPR/C/GTM/CO/4(7 May 2018) para. 38-39; and Belize, CCPR/C/BLZ/CO/1/Add.1 (11 December 2018), paras. 45-46; CESCR-concluding observations: Honduras 2016, paras. 11-12 in the context of exploitation of natural resources that may affect their economic, social and cultural rights; and Angola, E/C.12/AGO/CO/4-5(15 July 2016), para. 20 in the context of granting licenses for business for economic activities in their lands.

[186] HRC-concluding observation Suriname, CCPR/CO/80/SUR(4 May 2004) para. 21, where mercury was released into the environment as side-effect of logging and mining activities, affecting the traditional way of life. CESCR-concluding observation: Ecuador 2012 para. 9, regarding the adoption of an executive degree.

[187] See for instance, HRC-concluding observations: Venezuela 2015 para. 21(a) and Guatemala 2018, para. 39; CESCR-concluding observations: Cambodia 2009, paras. 15-16 and Honduras 2016, paras. 11-12; among others.

jeopardize or interfere" their culturally significant economic activities, in the context of the Isiboro Securé National Park road-building project.[188] Although the threats were not specified, the Indigenous opposition to the project was based on their previous experiences with projects of this kind and the assessments they made about potentially serious environmental and socio-cultural effects, mainly derived from the possible presence of foreigners and damages to local flora and fauna, potentially affecting the rich biodiversity that supports their traditional way of life and likely altering the delicate balance of the hydrological basin, with long-range consequences. [189] Likewise, the CESCR recommended Colombia to consult Indigenous peoples in the context of mining projects in Choco and Antioquia,[190] being the opposition based on previous experiences of serious environmental and social impacts, with particular concerns about deforestation that could alter the local fragile ecosystems and water reservoirs, subsequently affecting water and food supplies and their traditional livelihood.[191] Similarly, in analysing States' report the CERD regularly expresses concerns on the impacts on Indigenous lands and natural resources and their effects on their traditional way of life and rights; as such, it consistently recommends 'prior consultations'[192] to ensure that measures are not adopted without considering their concerns, rights and interests[193] (enabling the incorporation of TK) in a wide range of scenarios, among them, some in which the precautionary thresholds seem to be crossed. For instance, the CERD expressed concerns and recommended consultations regarding the Indonesian government's

[188] See HRC-concluding observation Bolivia 2013 paras. 25-26.
[189] See M. Muñoz, "El conflicto en torno al Territorio Indígena Parque Nacional Isiboro Sécure: Un conflicto multidimensional", Cultura y representaciones sociales, vol 7 n 14(March 2013), p 113, and D. Sanchez-Lopez, "Reshaping notions of citizenship: the TIPNIS Indigenous movement in Bolivia", Development Studies Research, 2:1,20-32(2015), p 24.
[190] CESCR-concluding observation: Colombia 2010 para. 12.
[191] See F. Idárraga, D. Muñoz and H. Vélez, *Conflictos Socio-ambientales por la extracción minera en Colombia: Casos de la inversión Británica* (Amigos de la Tierra Colombia, January 2010), pp 146-151.
[192] Saul (n 15), p 104; CERD-concluding observations: Honduras, CERD/C/HND/CO/1-5(13 March 2014), para. 20, in the context of natural resources projects including hydro-electrical energy and mining; Finland, CERD/C/FIN/CO/23(12 May 2017), paras. 16-17, regarding projects that affect the use and development of their traditional lands and resources; and Kenya CERD/C/KEN/CO/5-7(12 May 2017), para. 20, in the context of exploitation of natural resources on Indigenous lands. See also the following EWUA letters: Kenya, CERD/GH/mja/vdt(07 March 2014); Russia, CERD/GH/cg/ks(15 May 2015); and Canada CERD/90th/EWUAP/GH/MJA/ks(03 October 2016).
[193] CERD-General Recommendation 23, para. 4.

plan to establish oil palm plantations in the Kalimantan region,[194] where Indigenous peoples in the area raised concerns about potentially serious impacts on the biodiversity (native forests and species) and risks to several water basins, threatening their traditional way of life.[195]

Yet, the limited information contained in concluding observations and the absence to explicit references to the PP makes it unclear if this a part of a precautionary approach or, as noted above, an effect of the broad nature of the observations. Furthermore, the bodies have an inconsistent approach to impact studies, an important mechanism to identify possible threats and act before having full certainty about future harm, as mentioned above. In effect, so far only the CESCR and CERD have recommended States to conduct environmental and social impact assessments (with Indigenous participation) in conjunction with consultations in various scenarios,[196] suggesting the adoption of steps towards precaution and providing another instance to incorporate TK as a basis to effectively avoid potentially serious harm. This was the case in one of the two concluding observations where the CESCR referred to the situation of extractive projects that could affect Indigenous peoples' lands in 2019,[197] and four out of seven by the CERD,[198] indicating that these impact studies are often, but not always, recommended.

There is also an inconsistent approach in regard to FPIC; for instance, according to the HRC and CESCR guidelines should be 'sought' through consultations, as noted above; however, these bodies have occasionally

[194] CERD-concluding observation Indonesia CERD/C/IDN/CO/3(1 October 2007), para. 17.
[195] See E. Wakker, "The Kalimantan Border Oil Palm Mega-project", AIDEnvironment, April 2006, section 3
[196] CESCR-concluding observations: Chad 2009, para. 13, about mining operations and oil exploration in indigenous territories; Cambodia 2009, paras. 15-16, regarding decisions that may affect their lives, especially mining and oil projects; Russia E/C.12/RUS/CO/6(16 October 2017), para. 15 and New Zealand, E/C.12/NZL/CO/4(1 May 2018), para. 9, before and during extractive activities; Mexico 2018, para. 13, regarding natural resources projects; and Argentina, E/C.12/ARG/CO/4(1 November 2018), paras. 18-21, recommending a 'participatory assessment' with Indigenous peoples of impacts on their economic, social and cultural rights before authorizing exploitation of natural resources. CERD-concluding observations: Finland 2017, paras. 16-17 recommending cultural, environmental and social studies in collaboration with Indigenous peoples; and Peru 2018 paras. 16-17 and 20-21.
[197] See CESCR-concluding observation: Cameroon, E/C.12/CMR/CO/4(25 March 2019), paras. 13 and 17, recommending economic, social and cultural impacts. The other was Ecuador, E/C.12/ECU/CO/4(14 November 2019), not recommending these studies.
[198] CERD-concluding observations: Honduras, CERD/C/HND/CO/6-8(14 January 2019), para. 23; Guatemala, CERD/C/GTM/CO/16-17(21 May 2019), para. 20; Mexico, CERD/C/MEX/CO/18-21(19 September 2019), para. 21; and Colombia, CERD/C/COL/CO/17-19(12 December 2019), para. 19, the last two mentioning environmental and human rights impacts.

recommended 'obtaining' FPIC instead.[199] It could then be argued that consultations with the aim of seeking FPIC could be understood as the general rule, but if there is a possibility of 'substantive harm' (like in Poma Poma), FPIC must be obtained. An example of this can be found in a concluding observation in which the HRC recommended to consult Indigenous peoples 'with a view to obtaining' FPIC about projects that affect their rights but ensuring that FPIC is 'obtained' "before any measures that might jeopardize, or substantially hinder, their culturally significant economic activities are taken." [200] If this is the case, in situations where the precautionary thresholds are crossed (like in the case of the construction road in Bolivia mentioned above) presumably FPIC would act as an enhanced safeguard, proportional to the particular gravity of the threats. However, this criterion has not always been followed, because in seemingly similarly grave scenarios, these bodies have alternated between seeking[201] and obtaining consent.[202] The CERD presents a different contrast between theory and practice, with the General Recommendation 23 having a strong wording, calling States to "[e]nsure(…) that no decisions directly relating to their rights and interests are taken without their informed consent",[203] but

[199] See for instance HRC-concluding observations: Bolivia 2013, para. 25; Venezuela 2015 para. 21 and El Salvador, CCPR/C/SLV/CO/7(9 May 2018) para. 42, in which uses a somewhat different language and recommends consultations to "safeguard the exercise of that population's free, prior and informed consent" and CESCR-concluding observations Namibia E/C.12/NAM/CO/1(23 March 2016), para. 16 and Venezuela, E/C.12/VEN/CO/3(6 July 2015), para. 9, among others.
[200] HRC-concluding observation Chile 2007 para. 10.
[201] Regarding "any measure that might have a substantial impact on their way of life and their culture" in the context of natural resource projects in Indigenous lands (HRC-concluding observations: Ecuador CCPR/C/ECU/CO/6(11 August 2016), paras. 35-36; Colombia 2016 paras. 42-43; and Guatemala 2018, para. 39; CESCR-concluding observations: Honduras 2016, para. 11) and relocation (HRC-concluding observation Honduras 2017) para. 47 and CESCR-concluding observation Cambodia 2009 paras. 15-16).
[202] Regarding measures that would "substantially compromise or interfere with their culturally significant economic activities" (HRC-concluding observation Peru 2013 para. 24 and CESCR-concluding observation Sri Lanka 2010 para. 11, in the context of relocation) and HRC-Bolivia 2013, para. 25, concerning extractive projects) or "way of life and culture" (HRC-concluding observation Venezuela 2015 para. 21(a); CESCR-concluding observation Honduras 2016, para. 11, regarding projects that may affect Indigenous lands, territories and natural resources).
[203] CERD- General Recommendation 23, para. 4 (d).

in practice alternating in analogous scenarios between requiring FPIC[204] and weaker formulations ("with a view to obtain").[205]

In other words, the bodies do not consistently follow a pattern when it comes to FPIC, but like in the case of impact assessments, it suggests that in occasions requiring FPIC could act as a strong precautionary safeguard that ensure the consideration of TK and Indigenous concerns in the decision-making process.

In sum, like in the previous procedure the protection of cultural rights is achieved mainly through consultations (and sometimes impact assessments), applicable and recommended in a myriad of scenarios, including situations of reasonable concerns, based on TK and Indigenous experiences, about potentially serious effects on their traditional way of life and environment, acting then as a measure that contributes to the avoidance of serious impacts on their cultural rights. However, based on the information solely provided by the concluding observations, it is very difficult to assess if in situations where they 'may/might/would' be serious or substantive cultural effects on Indigenous peoples the bodies are actually guided by a precautionary approach, but at the very least there seems to be an awareness about the need to anticipate serious harm from early on, when there are not fully certain. When it comes to FPIC the issue is more open, because the general criteria regarding its application is not clear, as the bodies have recommended 'seek' and 'obtain' Indigenous FPIC in analogous scenarios; despite the inconsistencies, there have been situations where obtaining FPIC has been recommended as an enhanced and proportional precautionary measure in the case of potential 'substantive harm' (like in the Bolivia road project), ensuring that Indigenous TK, interests and understanding of risks are incorporated in the decision-making process, although more work is needed to clarify it.

[204] CERD-concluding observations: Finland 2017, para. 17 regarding any projects that affect the use of Sami traditional land and resources; Kenya 2017 para. 20 regarding projects to exploit ancestral lands or natural resources; and Nepal CERD/C/NPL/CO/17-23(29 May 2018), para. 23, regarding the approval of any project affecting their lands and resources.

[205] CERD-concluding observations: Nigeria 2007 para. 19, in the context of large-scale exploitation of natural resources; Chile 2013, para. 13 regarding projects that could affect their way of life; Peru 2014, para. 14 exploitation of natural resources and mining; Peru 2018, para. 21 and Honduras 2019 para. 19, regarding all legislative and administrative measures that may affect them.

4. Assessment

The Conventions are part of an important system that underpins the protection of human rights in international law; however, Indigenous peoples are absent from their texts. In practice, the monitoring bodies have reinterpreted the Conventions in order to accommodate their claims, relying on the rights to self-determination and culture (HRC and CESCR), or not to be discriminated (CERD). Generally speaking, the notion of cultural rights refers to Indigenous peoples' traditional way of life and the elements and values that are necessary for their development, that is, their lands; this means that the protection of cultural rights (which cannot be defined *in abstracto*), requires the protection of these elements, as well as the special protection that Indigenous peoples have with their territories.

According to the bodies, the protection of cultural rights requires Indigenous peoples' 'effective participation', which would enable the use of their TK in order to properly identify the practices and values that require protection. In the HRC's complaint procedure, this has been consistently interpreted as 'consultations', often focused on the prevention of foreseeable cultural harm. A more recent case (Poma Poma) may have expanded this approach by underscoring the importance of EIAs (in theory, with Indigenous participation) and thus recognising the need to act before the potential harm is imminent; also, it may have established a new standard, aligned with the PP, by which when the potential effects are of a substantive nature, consent would be required. However, the absence of subsequent cases that could confirm the incorporation of EIAs into the notion of 'effective participation'; clarify the meaning of FPIC and when it is needed; and what constitutes 'substantive harm' (including cases where spiritual values may be affected), makes it difficult to assess if these changes, that would strengthen the protection of Indigenous peoples' way of life and environment, are an expression of a new approach. The reporting procedure could have provided some clues in this respect; yet, it is structured in a more general way and lacks in-depth information about particular issues like States' compliance with Article 27 or the meaning of 'effective participation' or FPIC, thus being unsuitable to define "the contours of critical legal questions".[206] Yet, at the very least, this

[206] Barelli (n 171), pp 259-260.

procedure requires States to consult Indigenous peoples, even in scenarios where potentially non-negligible effects 'may/might/would' occur, although the lack of references to the PP indicates that this is due to the broad nature of this procedure and not in response to a PP guidance. At the same time, the CESCR and CERD sometimes rely on impact assessments, in conjunction with Indigenous consultations, indicating an awareness that to effectively avoid negative effects, it is necessary to act from early on and to provide a role for TK through these two procedures to contribute to this effort. In regard to FPIC, there seems to be no general criteria about when to 'obtain' it and when 'seek' it; however, in at least some occasions FPIC has been arguably acting as an enhanced precautionary safeguard, ensuring that Indigenous knowledge, concerns, understanding of risks and uncertainties and alternatives are taken into account in decision-making.

With all this in mind, it would be difficult to argue that the bodies tend to follow the PP, but it is clear that they have recognised the need to err on the side of caution in regard to Indigenous peoples' cultural rights and environment, and in doing so they have acknowledged the relevant role of Indigenous peoples' TK, in the form of consultations, impact assessments and even consent; however, there are several inconsistences and uncertainties in the implementation of these mechanisms, diminishing their effectiveness in the protection of Indigenous peoples' rights, especially when it comes to potentially substantive impacts and FPIC.

5. The ILO Convention 169

The ILO was created as a part of the Treaty of Versailles to improve conditions of labour and social standards, among other objectives.[207] It has a structure in which governments, workers and employees have an equal voice (manifested in the composition of the International Labour Conference and the Governing Body),[208] and a double supervisory system to monitor the implementation of the conventions ratified by its members.[209] It has been involved with Indigenous topics for a long

[207] ILO, "ILO Convention on Indigenous and Tribal Peoples 1989 (No 169): A Manual" ('ILO manual'), p 1.
[208] Ibid, p 2.
[209] The regular one is composed by the Committee of Experts on the Application of Conventions and Recommendation ('CEACR'), in charge of examining State's reports and issuing observations and

time,[210] elaborating the first international convention on Indigenous issues, ILO Convention 107 ('C107'),[211] criticized for its assimilationist approach and characterisation of Indigenous peoples as 'less advanced'.[212] C169 was adopted to replace C107,[213] establishing a framework that respects and protects Indigenous' rights and tackles discriminatory practices.[214] This is the only treaty regarding Indigenous peoples in international law and it has only 23 parties to date; yet, its influence extends beyond this legal character with the institution of certain Indigenous standards[215] and its role as a global reference.[216]

The Convention was negotiated with participation of Indigenous peoples, but they did not directly influence the drafting process;[217] despite this, it represents a step forward from C107, recognising Indigenous collective rights;[218] (internal) self-determination;[219] self-identification;[220] land rights (including ownership, possession and use) and their special relationship with their territories;[221] traditional cultural and

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direct requests, and the "Conference Committee on the Application of Standards", in charge of reviewing the Annual Report submitted by the CEACR during the Annual Conference. The special one allows employers and workers to present a 'representation' to the Governing Body against a State that has "failed to secure in any respect the effective observance within its jurisdiction of any Convention to which it is a party" and delegates, governments or the governing body can file a 'complaint' against a State, which if deemed receivable, appoints a Tripartite Committee and invites both parties to submit information, adopting a report with the findings. Indigenous peoples do not have direct access to the monitoring procedure, so their claims have been brought by workers' unions. See S. Rombouts, "The Evolution of Indigenous Peoples' Consultation Rights under the ILO and UN Regimes", 53STAN.J.INT'L169-224(2017), p 192.

[210] "Understanding the Indigenous and Tribal Peoples Convention, 1989 (No 169): Handbook for ILO Tripartite Constituents" ('ILO handbook'), p 4.

[211] ILO, Indigenous and Tribal Populations Convention, C107, 26 June 1957.

[212] See for instance C107 Articles 1, 2 and 4; and Thornberry (n 122), pp 326-338.

[213] A. Yupsanis, "The International Labour Organization and Its Contribution to the Protection of Indigenous Peoples' Rights", Canadian Yearbook of International Law Vol 49(2012), p 129.

[214] C169 preamble.

[215] Xanthaki (n 98), p 90.

[216] Rombouts (n 209), p 182; ILO Manual, Foreword. The Convention has been sometimes cited by the bodies in concluding observations (e.g., HRC-concluding observation Honduras 2017; CESCR-concluding observation Ecuador 2004; and CERD-concluding observation Paraguay 2016) and regional courts, and influenced the drafting of UNDRIP.

[217] As Berman puts it, "the ILO has proceeded without the clear endorsement or effective participation of Indigenous peoples in its deliberations". See H. Berman, "The International Labour Organization and Indigenous Peoples: Revision of ILO Convention No. 107 at the 75th Session of the International Labour Conference 1988", 41ICJ.Rev.48(1988), pp 48-52. See also S. Venne, "The New Language of Assimilation" in Without Prejudice Vol. II No 2(1989), pp 64-65.

[218] C169, preamble and Articles 1-3.

[219] Although it is not explicitly mentioned in C169, it is implicit in the preamble ("[r]ecognising the aspirations of these peoples to exercise control over their own institutions, ways of life and economic development"). See Rombouts (n 209), p 175 and Barsh (n 108), p 842.

[220] C169, Article 1.2.

[221] Ibid., Part II.

economic activities (including hunting, fishing and gathering) [222] and non-discrimination,[223] among others. It also explicitly recognises the different aspects of the Indigenous way of life; for example, Article 5 notes that in the implementation of the Convention their "social, cultural, religious and spiritual values and practices(…) shall be recognised and protected"; Article 7.1 refers to Indigenous peoples' right to decide their own priorities for development, as it affects their lives, beliefs, institutions, spiritual well-being and their lands, and control, to the extent possible, their economic, social and cultural development;[224] and Article 13.1 highlights the special relationship between Indigenous peoples and their lands, noting that the "special importance for the cultures and spiritual values of the peoples concerned of their relationship with the lands or territories" shall be respected when applying the Convention.[225] In this context, the Convention explicitly refers to the environment in conjunction with socio-cultural values; for instance, Article 4.1 requires special measures to safeguard "the persons, institutions, property, labour, cultures and environment of the peoples concerned", and Article 7.3 establishes studies "to assess the social, spiritual, cultural and environmental impact" of certain activities" (see below). Also, there is a general obligation to protect the Indigenous peoples' environment in Article 7.4 with their participation ("[g]overnments shall take measures, in co-operation with the peoples concerned, to protect and preserve the environment of the territories they inhabit"). This not only means that the protection of Indigenous' values (cultural, spiritual, social) goes hand in hand with the protection of their environment,[226] but also, as noted by Errico, that they interact with international environmental law,[227] including then obligations that States may have to comply with and principles like the PP.

[222] Ibid., Article 23.
[223] Ibid., Articles 2 and 3.
[224] See also Article 4.1 and 32.
[225] C169, Article 13.1. See also footnote 82, and International Labour Conference, "Record of proceedings 76th session" (1989)('ILC record of proceedings'), p 31/12, where the representative of New Zealand noted that this spiritual dimension "is of great importance to Indigenous people and lies at the heart of their relationship with the environment."
[226] See for example Article 15.2, establishing the obligation to consult Indigenous peoples before the exploration and exploitation of natural resources in their 'lands', a notion that includes the concept of 'territories', "which covers the *total environment* of the areas which the peoples concerned occupy or otherwise use" [emphasis added] as per Article 13.2.
[227] S. Errico, "Control over Natural Resources and Protection of Indigenous Territories" in Hohmann and Weller (n 171), pp 452-453, mentioning that the existence of a relationship between the

6. The protection of Indigenous peoples' rights

Unlike the UNTS, where consultation was a form of participation, in the C169 they are independent but interconnected rights, established to ensure that Indigenous peoples can decide their priorities and exercise control over their development,[228] being therefore an expression of self-determination, [229] and constituting the cornerstone of this Convention.[230]

6.1 Participation

The Convention does not impose a model of Indigenous participation, but the CEACR clarified that this participation has to be 'effective', allowing them to have a real voice and influence the policies likely to affect them. [231] In this context, participation is required in general issues like the development of systemic and coordinated action to protect Indigenous rights; [232] their control, "to the extent possible, over their own economic, social and cultural development", [233] including decision-making at every level; [234] and "the formulation, implementation and evaluation of plans and programmes for national and regional development which *may* affect them directly"[emphasis added]. [235] It is also required in specific circumstances related to the environment, such as the use, management and

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enjoyment of human rights and the protection of the environment "adds to the specific obligations that States may have under environmental international law", also mentioning the case of C169.

[228] ILO handbook, p 19; see also International Labour Standards Department, "Indigenous & Tribal Peoples' Rights in practice: A Guide to ILO Convention No 169" (2009)('ILO Guide'), pp 59-60 and the following Reports of the Tripartite Committee, submitted following a Representation under Article 24 of the ILO Constitution regarding ILO C169 ('Tripartite Committee reports'): Brazil 2009 GB.295/17, para. 44; Chile 2016 GB.326/INS/15/5, paras. 114-115 and Peru 2016, GB.327/INS/5/3, para. 292.

[229] Anaya (n 15), p 155 noting that consultation and participation "are grounded in general principles of self-government and self-determination."

[230] ILO handbook, pp 11 and 18-19. The ILO Guide states that consultation and participation are "the basis for applying all the others [provisions]" ILO guide, p 59.

[231] CEACR, General Observation on Convention No. 169, 79th Session (2008)('General Observation 2008'), p 1.

[232] C169, Articles 2 and 33.

[233] Ibid., Article 7.1.

[234] Ibid., Article 6.1(b), being the levels national, regional and local, according to the ILO Guide pp 60-61. Anaya also adds the international level. Anaya (n 15), pp 153-154.

[235] C169, Article 7(1). See also ILO handbook, p 18.

conservation of natural resources pertaining to Indigenous lands;[236] in adopting measures to protect their environment, as mentioned above; and in the case of planned development activities, where governments "shall ensure that, whenever appropriate, studies are carried out, in co-operation with the peoples concerned, to assess the social, spiritual, cultural and environmental impact on them".[237] The *travaux préparatoires* note that these studies allow for the careful assessment of 'potential impacts' of development activities on Indigenous peoples,[238] also considering that often effects on their way of life (especially cultural/spiritual) cannot be identified without their contribution. In this context, and albeit not mentioned in this Article,[239] TK plays an important role, integrating an Indigenous perspective on the uncertainties, risks and threats of an activity based on their own knowledge and experiences. This was implicitly acknowledged during the discussion of Article 7, where an amendment requiring governments to ensure that Indigenous peoples could conduct their own impact studies was rejected to avoid parallel sets of studies,[240] indicating that their knowledge and concerns (that would have been included in their impact studies) must be incorporated in these impact assessments. This not only speaks to the notion of 'scientific uncertainty' as understood from a precautionary perspective (i.e., not based on a narrow notion of 'science' but including other knowledge systems), but also establish a stronger mechanism than regular impact assessments, which content is left to States[241] and often only include vague references to Indigenous participation or the consideration of their concerns.[242]

[236] Ibid., Article 15.1.
[237] Ibid., Article 7.3.
[238] International Labour Office, "Partial revision of the Indigenous and Tribal Populations Convention 1957(No 107) Report VI(1)" 75th Session (1988)('ILO travaux report VI(1)'), p 65.
[239] Indigenous knowledge is mentioned in Article 27, in a context of education programmes that shall include it together with their histories, value systems, technologies and social, cultural and economic aspirations. Some implicit references can be found in Article 23, when mentioning the recognition of traditional activities in maintaining their culture and Article 25.2 regarding traditional healing practices.
[240] L. Swepston, *The Foundation of Modern International Law on Indigenous and Tribal Peoples Vol. I: Basic Policy and Land Rights* (Brill-Nijhoff, 2015), pp 204-205.
[241] See Pulp Mills, para. 205.
[242] See for example Article 4 Ley 19300 sobre Bases Generales del Medio Ambiente and Decreto 66, 2013, Chile.

However, the qualification of 'whenever appropriate' (introduced because it was considered 'not desirable' to force States to undertake them),[243] weakens this duty,[244] because governments argue that these studies are not needed (i.e., are not 'appropriate'), even in situations of uncertainty. For instance, Bolivia claimed that some forestry concessions for logging granted by the government in areas occupied by Indigenous peoples did not seriously affect them, which is why it didn't conduct studies (or consulted them), a claim rejected by the Committee, noting that the potential effects on Indigenous groups were substantial (especially due to social conflicts, the effects over their property rights and the impossibility to conduct traditional activities), recommending consultations and environmental, cultural, social and spiritual impact studies.[245] Similarly, Brazil argued that a draft bill concerning forests concessions excluded Indigenous lands, so they would not be affected, failing to conduct studies or consult them; this argument was rejected by the Committee, pointing out the existence of uncertainties regarding credible and serious potential impacts (logging, roads opening, foreign presence that would affect their property rights and their traditional activities) on Indigenous lands and way of life, which could be identified through impact studies and consultations.[246]

In this context, the Committee often relies on Article 15.2,[247] which states that "[i]n cases in which the State retains the ownership of mineral or sub-surface resources or rights to other resources pertaining to lands, governments *shall establish or maintain procedures through which they shall consult these peoples, with a view to ascertaining whether and to what degree their interests would be prejudiced*, before undertaking or permitting any programmes for the exploration or exploitation of such resources pertaining to their lands."[emphasis added].[248] This implies that, when it

[243] International Labour Office, "Partial revision of the Indigenous and Tribal Populations Convention 1957(No 107) Report IV(1), 76th Session (1989), p 8.
[244] See Yupsanis (n 213), p 145.
[245] Tripartite Committee report Bolivia 1999, paras. 14-16, 31-32 and 38-41.
[246] Tripartite Committee report Brazil 2009, paras. 9-13, 20-23, 41-42, 46 and 49-59.
[247] See for instance Tripartite Committee reports: Bolivia 1999 paras. 38-39 and 44(b); Ecuador 2001, paras. 32 and 45(a); and Guatemala 2007 paras. 52 and 60(a), among others.
[248] Generally speaking, this Article has been opposed by Indigenous peoples because it deprives them of the ownership of these natural resources, despite what Article 13.2 may suggest when incorporating the notion of 'territories' and 'total environment' to 'lands' in Article 15 (i.e., that Indigenous peoples have rights over the trees, water, animals, air and minerals pertaining to their lands). See International Labour Office, "Partial revision of the Indigenous and Tribal Populations Convention 1957(No 107) Report VI(2)" 75th Session (1988), p 53, mentioning the existence of a consensus about granting Indigenous' control only over the wildlife and other resources (flora, fauna, waters) in their traditional

comes to environmental issues, something more than consultations is required, otherwise C169 would have just used a more direct language like in Articles 6 ("governments shall consult the peoples concerned") or 17 ("[t]he peoples concerned shall be consulted"). Considering the similar objectives of Articles 7.3 (assessing potential impacts on Indigenous peoples) and 15.2 (ascertain effects on Indigenous peoples' interests), and that the only other measure detailed in C169 regarding natural resources/environment are impact studies, it is logical to conclude that the 'procedures' mentioned in the latter refers to these studies,[249] which must be conducted in conjunction with consultations.[250] This enables the inclusion of traditional knowledge to obtain the best information available regarding potential effects on every aspect of Indigenous peoples' life.

6.2 Consultations

According to Article 6, consultations must be conducted by States "whenever consideration is being given to legislative or administrative measures which *may* affect them [Indigenous peoples] directly"[251] [emphasis added], i.e., when a State's decision can affect Indigenous peoples "in ways not felt by others in society",[252] with the C169 highlighting in particular the exploration/exploitation of natural resources that belong to the State in Indigenous lands[253] and the transference of lands outside

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lands that "are fundamental to the continuation of their traditional lifestyles", meanwhile most of States reserved their rights over minerals. See also Barsh (n 108), p 846 and Clavero (n 293), p 47, saying that "[t]here is no Indigenous right over the natural resources themselves, but rather a right to participate in the policy-making processes of the States that control resources."

[249] See also Swepston (n 240), p 279, and ILO manual, p 37.

[250] See for instance Tripartite Committee reports in which Indigenous lands were affected: Bolivia 1999, paras. 38-39; Colombia 2001 (license for oil exploration), para. 90; Ecuador 2001, para. 38-39 (oil exploration/exploitation); Guatemala 2007, paras. 51-53 and 60 (mining); Brazil 2009, para. 62 and Peru 2016, para. 315 (hydroelectric power plants), among others. See also observations from the CEACR in which consultation and participation procedures are treated together, such as Costa Rica 2016, Chile 2017, Honduras 2017 and Peru 2018; ILO travaux report VI(1), p 36, noting that the studies would enhance the value of consultations by promoting a factual assessment of Indigenous concerns; Swepston (n 240), p 195; and J. Anaya, "Report of the Special Rapporteur on the situation of human rights and fundamental freedoms of Indigenous people" A/HRC/15/37, 19 July 2010, para. 71, mentioning that impact studies are, by definition, related to the consultation process.

[251] C169, Article 6.1(a).

[252] This happens "when the interests or conditions of Indigenous peoples that are particular to them are implicated in the decision, even when the decision may have a broader impact". J. Anaya, "Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous People", UN Doc. A/HRC/12/34, 15 July 2009, ('2009 Report'), para. 43.

[253] C169, Article 15.2.

the Indigenous community.[254] This process is aimed to ensure Indigenous peoples' participation in decision-making, a social dialogue, and a mutual understanding,[255] reversing a historical pattern of exclusion and avoiding the imposition of important decisions on them.[256] To ensure this, it has certain requirements, so they must be conducted:

- prior to the measure subject to consultation is taken, as the objective of the consultation is to reach an agreement/obtain consent[257] and ascertain if and to what degree Indigenous interest may be affected;[258]
- in good faith, implying trust and respect for the different interests and values, some flexibility and a "sincere wish to reach a common accord";[259]
- through Indigenous' representative institutions, elected by the Indigenous peoples themselves[260] (e.g., a council of elders or Indigenous parliaments), considering the diverse Indigenous societies and practices;[261]
- through appropriate procedures, which in practice, translates to the creation of "favourable conditions for achieving agreement or consent to the proposed measures, independent of the result obtained;"[262] and
- with the objective to achieve consent or agreement for the measure, meaning that consent is not the necessary result of the consultations[263] (i.e., not a requirement), with the exception of Article 16, relocation (see next section).

There is no particular model of consultation,[264] because of the various circumstances in which they are required and the different ways in which Indigenous peoples are organised, reflecting their particular cultural identity and traditions; thus,

[254] Ibid., Article 17.2.
[255] CEACR General Observation on Convention No. 169, publication 2019 ('General Observation 2019'), p 3.
[256] 2009 Report, para 41.
[257] C169, Article 6.2
[258] Ibid., Article 15.
[259] CEACR, General Observation on Convention No. 169, adopted 2010, published 100th ILC session ('General Observation 2010'), p 8, and ILO guide, p 62.
[260] Tripartite Committee reports: Ecuador 2001, para. 44; Mexico 2004 (GB.289/17/3), para. 102; Argentina 2008 (GB.324/INS/8/2), para. 75, highlighting that the institution needs to be 'truly representative'.
[261] ILO handbook, p 15 and ILO manual, p 17.
[262] Tripartite Committee Reports: Mexico 2004 para. 89 and Brazil 2009, para. 42.
[263] International Labour Conference, "Report of the Committee of Experts on the Application of Conventions and Recommendations" (2011), p 788.
[264] General Observation 2008, p 1; Xanthaki (n 98) p 256, noting that there are several forms of consultations.

there is an important element of flexibility for States to conduct this procedure.[265] However, it has been criticised that the use of expressions like 'appropriate procedures' introduces a degree of ambiguity,[266] resulting in States arguing that public participation procedures contained in EIAs constituted consultations,[267] or engaging in informative meetings, without deliberation or accepting Indigenous concerns, to discharge this duty.[268] This led to the ILO bodies to repeatedly emphasize that consultations should be conducted following all the requirements in Article 6; that 'informative meetings' and proforma consultations do not meet the requirements of C169; and that "there must be a genuine dialogue" between governments and Indigenous peoples, based on good faith and mutual respect.[269] More recently, the CEACR highlighted that consultations should be seen as an essential instrument to guarantee the "free, effective and permanent participation" of Indigenous peoples in decision-making processes that affects them,[270] constituting an opportunity to influence a decision that may affect their interests.[271] In this sense, Anaya and Puig note that the consultations requirements protect against arbitrariness,[272] which is also reinforced by the fact that, as consultation itself is a process that may affect Indigenous peoples, this procedure "should be the product of consensus", generating a climate of trust and mutual respect.[273]

The wording of the Convention suggest that consultations are applicable in very broad scenarios where Indigenous peoples could suffer negative consequences, including situations when there is no full scientific certainty about possible effects on their way of life; in addition, the CEACR underscored that consultations must take

[265] See also C169, Article 34.
[266] M. Cabrera Ormaza, *The Requirement of Consultation with Indigenous Peoples in the ILO: Between Normative Flexibility and Institutional Rigidity* (Brill Nijhoff, 2017), p 2.
[267] B. Olmos Giupponi, "Free, Prior and Informed Consent (FPIC) of Indigenous Peoples before Human Rights Courts and International Investment Tribunals: Two Sides of the Same Coin?", International Journal on Minority and Group Rights 25 (2018), p 499. See also Tripartite Committee report Chile 2016 paras. 180-181.
[268] A. Alva-Arevalo, "El derecho a la consulta previa de los pueblos indigenas en el Derecho Internacional" Cuadernos Deusto de Derechos Humanos Num 76, Universidad de Deusto, Bilbao (2014), p 76. See also Tripartite Committee report Guatemala 2007, para. 49
[269] General Observation 2010, pp 8-10 and General Observation 2019, p 3. See also Tripartite Committee reports: Ecuador 2001, para. 38; Guatemala 2007, GB.294/17/1, para. 49; and Peru 2016, para. 315, among others.
[270] General Observation 2019, p 4.
[271] Anaya (n 15), p 154. See also General Observation 2008, p 1.
[272] J. Anaya and S. Puig, "Mitigating State Sovereignty: The Duty to Consult with Indigenous Peoples" Arizona Legal Studies Discussion Paper No.16-42, p 23.
[273] 2009 Report, para. 51.

place as early as possible[274] (at the 'consideration' stage) and that they "need to allow for the full expression of the viewpoints of the peoples concerned(…) based on the full understanding of the issues involved" so they can influence the outcome of the decision.[275] This means that there is an important role for Indigenous peoples' perspectives and concerns, based on experiences, observations and scientific knowledge, of what constitutes a risk, the assessment of the possibilities that these risks could occur and the discussion of what measures can be adopted to avoid them, anticipating potential harm on their livelihood and environment. In this context, the Expert Mechanism on the Rights of Indigenous Peoples noted that "Indigenous peoples should have a major role in establishing whether the measure or project affects them at all and, if it does, the extent of the impact. Indigenous peoples may highlight possible harms that may not be clear to the State or project proponent, and may suggest mitigation measures to address those harms",[276] among them, cultural and spiritual effects. For instance, in a case brought against Colombia before the Tripartite Committee, the government granted a license for oil exploration in Indigenous lands without consultation of the U'wa peoples, who had reasonable concerns not only about potential environmental effects based on the impacts of this activity, but also about their culture, as "the extraction of any component of Indigenous territory that is not undertaken in accordance with their own cultural rules affects their vision of the universe and undermines their cultural integrity as a people". [277] The government argued that their own studies, conducted without Indigenous participation, showed that the U'wa were not going to be affected[278] and therefore they were not consulted, proceeding with the concession without full certainty about potential effects (especially cultural/spiritual), further arguing that "even if there was originally a risk of the community of being affected, this has now been averted" because of a subsequent modification on the boundaries of the

[274] General Observation 2010, p 8. See also Tripartite Committee reports: Colombia 2001 (GB.277/18/1), para. 90, Ecuador 2001, GB.277/18/4, paras. 38-39 and Peru 2016, para. 315.
[275] General Observation 2008, p 1 and Tripartite Committee reports: Argentina 2008 para. 70.
[276] Study of the Expert Mechanism on the Rights of Indigenous Peoples, "Free, prior and informed consent: a human rights-based approach" 10 August 2018, A/HRC/39/62, para. 34. See also 2013 Report, para. 59 and Tripartite Committee reports: Mexico 2006 para. 14 (where the authors noted that lack of consultations prevents them to formulate viable alternative projects) and Argentina 2008, para. 70 (where the Tripartite Committee remarked that consultations allow for the consideration of Indigenous experiences, problems and views).
[277] Tripartite Committee Report: Colombia 2001 paras. 28 and 30-32.
[278] Ibid., paras. 61-65.

concession.[279] The Tripartite Committee noted that the project was situated within the U'wa's ancestral lands and thus they should have been consulted before granting the license to determine if and how they would be affected, also emphasizing that they should be consulted in the future (and conduct impact assessments) in case of new exploration projects, to fully understand possible effects and the likely sociocultural impacts of a project,[280] underscoring the role of consultations and TK in situations of potential threats of serious harm, including regarding cultural and spiritual values.

6.3. Consent

As noted above, achieving consent or an agreement is an objective of consultations, not a requirement, with the exception of Article 16, stating that Indigenous peoples can only be removed from their lands with their FPIC. The C169 does not clarify the meaning of FPIC, but the ILO Guide explains that 'free' means without coercion, intimidation or manipulation;[281] 'prior', to consent sought in advance with sufficient time respecting Indigenous processes;[282] finally, 'informed' refers to the information provided, which should include, among other things, the nature and size of the proposed project/activity; its purpose, duration and location affected; and "a preliminary assessment of the likely economic, social, cultural and environmental impact, including potential risks(…) in a *context that respects the precautionary principle*[emphasis added]."[283] This also confirms that impact assessments are required as an integral part of consultations, to obtain 'informed' consent, and the important connection with the PP.

The term 'consent' itself is not defined, but from the context it seems to refer to control/permission to do something (adopt a measure or remove them from their lands). This understanding is supported by the *travaux*, because during the drafting of C169, it was discussed that Indigenous peoples "should have the right(…) to play

[279] Ibid., para. 66.
[280] Ibid., paras. 84-93.
[281] ILO guide, p 63, citing the UN Economic and Social Council, Permanent Form on Indigenous Peoples, "Report on Free, Prior and Informed Consent", UN Doc.E/C.19/2005/3, 17 February 2005, p 12.
[282] Ibid.
[283] Ibid.

an effective participatory role in the planning and implementation of development programmes affecting them…[They should not] have absolute control and the right of ultimate decision"[sic], and that they should have an effective voice in decisions affecting them but without having a "power equal to that enjoyed by States",[284] or a veto power.[285] Doyle refers to this understanding as a "binary veto-no-veto conception of FPIC".[286]

This question of control, added to concerns about external self-determination, the creation of a 'State within a State',[287] and fears that the inclusion of a provision that requires consent could prevent the ratification of C169,[288] led to the establishment of consent as a mere objective of consultations, even if this could result in situations where "no real account was taken of the views expressed and of the true needs of the people being affected".[289] This did not satisfy the aspirations of Indigenous peoples, who consider FPIC as a prerequisite and manifestation of self-determination, being fundamental in decision-making,[290] leading to heavy criticism from Indigenous leaders as well as academics.[291] For instance, several Indigenous representatives expressed in the ILO Plenary that without consent, their lives and territories will remain vulnerable to destructive government action, allowing for all forms of resource exploitation on their lands, and that anything less than having the power to accept or reject projects or actions that affect them would deny their integrity and right to control their destiny.[292] Clavero considers that consultations without FPIC are not an expression of self-determination, and that the Convention assumes "that a guarantee of informed consultation, along with the good faith with

[284] ILO travaux report VI(1), p 30 and 113. See also ILC record of proceedings, para. 68, narrating how the Workers' proposal to replace 'consult' by 'obtain the consent' was rejected.
[285] General Observation 2010, p 5; Tripartite Committee reports: Ecuador 2001, para. 39, Argentina 2008, para. 81 and Chile 2016 para. 129.
[286] C. Doyle, "The Philippines Indigenous Peoples Rights Act and ILO Convention 169 on tribal and indigenous peoples: exploring synergies for rights realization", The International Journal of Human Rights, 24:2-3 (2020), p 174.
[287] ILO travaux report VI(1), p 30.
[288] Ibid. See also A. Yupsanis, "ILO Convention No. 169 Concerning Indigenous and Tribal Peoples in Independent Countries 1989–2009: An Overview", Nordic Journal of International Law 79 (2010), p 445.
[289] ILO travaux report VI(1), p 30, although they also noted that despite this, it was a considerable advance over C107.
[290] Anaya (n 106), para. 34.
[291] A. Lawrey, 'Contemporary Efforts to Guarantee Indigenous Rights Under International Law', 23 Vanderbilt Journal of International Law (1990), p 719. Yupsanis (n 213), p 142.
[292] ILC record of proceedings pp 25/10 and 25/11, 31/7 and 31/10, among others.

which it is to be undertaken, can result in legitimate policies on matters on which no consent is reached", an assumption that weakens the negotiating position of Indigenous peoples.[293] Strelein argues that the absence of consent as a requirement reflects a paternalistic approach, where States maintain the power to determine what is acceptable in the treatment of Indigenous peoples.[294] Venne points out that this consultation process allows States to have "an alibi to say that they did ask us, but there is no requirement to implement our position", and that it would be better to "ignore the consultation game(…) [and] insist on consent as a prerequisite to any project that affects our life, livelihood or environment".[295]

Despite this, consultations are one of the most powerful tools of C169,[296] not only requiring negotiations in good faith before a measure is adopted, allowing Indigenous peoples to influence the decision-making process and incorporate their knowledge, concerns, understanding of risks and uncertainties in this process, as noted above, but also constituting a safeguard against the violations of their human rights.[297] In this sense, even if States have the final saying about the measure consulted,[298] they should at least take into account their concerns in good faith. Moreover, consultations are subject to international[299] and national oversight, meaning that Indigenous organizations can challenge the way they are/were conducted[300] (also considering that States often fail to comply with its requirements),[301] which has resulted in measures and projects being stopped or postponed by courts and bodies.[302]

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[293] B. Clavero, "The Indigenous Rights of Participation and International Development Policies", Arizona Journal of International & Comparative Law Vol 22, No. 1(2005), pp 45-46.
[294] L. Strelein, "The Price of Compromise: Should Australia Ratify ILO Convention 169?" in C. Bird, G. Martin, and J. Nielsen (eds), *Majah: Indigenous Peoples and the Law* (Leichhardt: Federation Press, 1996), pp 71 and 77.
[295] Venne (n 217), p 58-59.
[296] Yupsanis (n 213), p 143.
[297] Anaya and Puig (n 272), pp 22-23.
[298] Ibid., p 22; J. Parra, 'The Role of Domestic Courts in International Human Rights Law: The Constitutional Court of Colombia and Free, Prior and Informed Consent', International Journal on Minority and Group Rights 23(2016), p 368.
[299] F. MacKay, "A Guide to Indigenous Peoples' Rights in the International Labour Organization" Forest Peoples Programme (2003), p 10; Yupsanis (n 213), p 143.
[300] R. Barsh, "An Advocate's Guide to the Convention on Indigenous and Tribal Peoples", 15OKLA. CITYU.L.REV.209(1990), pp 219-220, noting that they can argue about inappropriate procedures, insufficient representation or not being in good faith. Yupsanis (n 213), p 143.
[301] See also L. Swepston, "Progress through supervision of Convention 169", The International Journal of Human Rights 24:2-3 (2020), p 118, noting that some states "have not made serious efforts

However, it is true that there are certain situations that go beyond the protection that this safeguard can provide, because the possible effects of a measure subject to consultation by a State could jeopardize their survival[303] as peoples. In my view, and aligned with the criticism regarding FPIC as an objective, decisions of these kind cannot be left to States, who often develop attitudes, doctrines and policies to justify taking lands and resources from Indigenous peoples.[304] In other words, a stronger measure is needed to effectively protect their rights (in line with the precautionary approach), ensuring that Indigenous peoples' input, concerns and knowledge are actually taken into account, implementing the solutions that they propose/negotiate and that only the risks that they deem acceptable could occur. At first, it seems that this approach is followed in Article 16, stating that Indigenous peoples shall not be removed from the lands without their FPIC and only as an exceptional measure.[305] Albeit it is not always possible to make broad assumptions, generally speaking this is a scenario which could substantively disrupt Indigenous peoples' life, severing ties with their lands and moving them to a place where they do not have any connection or history, thus creating a risk of extinction and cultural or physical rootlessness, deeply affecting their identity,[306] and every aspect of their life, including material needs (e.g., hunting, or obtaining medicine or clothes); rituals, cultural and spiritual connections; and their TK (which then becomes useless and unable to be updated and passed down through the generations, ending up

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to consult", including in situations of exploitation of natural resources. and illustrated by the large body of cases analysed in this work.

[302] R. Suárez, "Three decades since the ILO's Convention 169: reflections in light of the experience of the private sector with prior consultation, The International Journal of Human Rights, 24:2-3(2020), pp 274-275 and N. Pirsoul, "The deliberative deficit of prior consultation mechanisms", Australian Journal of Political Science(2019), p 257.

[303] Survival does not only refer to ensure the right to life but also to ensure the continuance of their relationship with their land or their culture and their traditional way of life, as well as the respect, guarantee and protection of their distinct cultural identity, social structure, economic system, customs, beliefs and traditions. IACtHR, "Case of the Saramaka people v. Suriname, Judgment of August 12, 2008 (Interpretation of the Judgment on Preliminary Objections, Merits, Reparations, and Costs)", paras. 29 and 37.

[304] E. Daes (n 112), para 23. See 2009 Report, para 47, pointing out that "significant, direct impact on indigenous peoples' lives or territories establishes a strong presumption that the proposed measure should not go forward without(…) consent." See also Barelli (n 171), pp 248-249 noting that if States could implement measures that likely to produce significant effects on their cultures and lives, "the very purpose of the Indigenous rights regime would be seriously undermined".

[305] Article 16.1 and 16.2

[306] IACtHR, *Chitay Nech et al*. v. *Guatemala*, 25 May 2010, Preliminary Objections, Merits, Reparations, and Costs, Series C, No. 212, para. 147.

forgotten).[307] Therefore, it seems that the requirement of FPIC would act as an enhanced precautionary measure, acting from early on (at the 'consideration' stage, following consultations), before the threats become imminent.

Yet, and greatly weakening this protection, Article 16 also establishes that States can circumvent the lack of consent if they follow "appropriate procedures established by national law and regulations"; that, 'whenever possible' they shall return to their lands; and that if this is not possible, they should be compensated with lands of at least equal quality and legal status or money.[308] What is interesting is that during the discussion of C169, it was identified as a flaw of C107 the many exceptions to its Article 12, which prohibited the removal of Indigenous 'populations' from their territories without their free consent, resulting in practice in their removal from their lands at the States' will, without consent, based on economic and national security reasons.[309] Despite this, issues regarding self-determination mentioned above and economic reasons (a considerable number of projects regarding hydroelectrical or mineral extraction resulted in relocation)[310] led to this broad exception in Article 16.2, reducing the effectiveness of this provision and transforming it more into a consultation process that only requires more active efforts to reach an agreement,[311] and leaving the ultimate decision to States, who can then impose projects and developments, as long as they can justify the decision to bypass consent. This fails to ensure that potentially substantive harm to Indigenous peoples, especially spiritual effects usually unknown to States,[312] will not materialise, also

[307] Ibid. See also R. Barsh, "Indigenous knowledge and biodiversity", in A. Gray "Indigenous Peoples, Their Environments and Territories", included in D. Posey (ed), *Cultural and Spiritual Values of Biodiversity* (UNEP, 1999), p 75.
[308] C169, Article 16.2-16.4.
[309] ILO travaux report VI(1), p 113.
[310] Ibid., p 63.
[311] See for instance Thornberry (n 122), p 357 saying that the Article just suggests 'actively seeking consent', and the ILO travaux report VI(1), p 65 noting that the ultimate decision concerning projects that entail relocation will remain with governments but "it is vital that there be as much consultation as possible with the Indigenous and tribal peoples who will be affected, before decisions are taken".
[312] Venne for instance mentions that "[r]emoving us from our land base is, in fact, to take away our lifeforce". Venne (n 217), p 63. Posey recounts a Cherokee testimony in a context of forced relocation: "'If we are to make our offerings at a new place, the spiritual beings would not know us. We would not know the mountains or the significance of them. We would not know the land and the land would not know us... We would not know the sacred places... If we were to go on top of an unfamiliar mountain we would not know the life forms that dwell there'" D. Posey, "Introduction: Culture and Nature-The Inextricable Link" in Posey (n 307), p 5.

considering that relocations are becoming less and less 'exceptional' because of economic reasons,[313] as illustrated in several observations and direct requests.[314]

When it comes to another situation with potentially substantive effects on Indigenous peoples, the exploration/exploitation of natural resources in Indigenous lands (Article 15.2), [315] the C169 only mentions consultations (and impact assessments, as clarified in practice), despite the fact that in the *travaux* it is explicitly noted that these types of projects are one of the most common causes of removal from Indigenous lands [316] and that the effects on Indigenous peoples' livelihood could be similar to those from relocations (e.g., loss of traditional lands, lack of control over their development, exhaustion of natural resources vital for their traditional livelihood, and the destruction of their traditional environment, making it impossible for them to preserve their traditional lifestyles). [317] Criticising this, Thornberry notes that relying on a mere consultation process "may not amount to much in practice".[318] MacKay says that the C169 "does little more than place a number of extremely weak procedural hurdles in the way of the continued exploitation and destruction of indigenous lands and territories".[319] Doyle remarks that their right to self-determination "is frozen in a state of perpetual limbo" if Indigenous peoples are constantly facing the prospect of having to accept imposed projects that could substantially impact them.[320] Moreover, it is difficult to see how Article 15.2 (and Article 16) relates to Article 13.1 and the duty ('governments shall') to protect and respect the special relationship that Indigenous peoples share with their lands and territories,[321] including their 'total environment',[322] that is, all the things that belong to the lands themselves as a whole, such as waters, plant and

[313] Alva-Arevalo (n 268), p 72.
[314] See for instance CEACR Direct requests: Ecuador, adopted 2014, published 104th ILC session (2015) and Brazil adopted 2015, published 105th ILC session (2016), among others.
[315] As noted by Daes, many States claimed ownership over mineral and natural resources in Indigenous lands, causing "extremely adverse impacts". E. Daes, "Prevention of Discrimination and Protection of Indigenous Peoples. Indigenous peoples' permanent sovereignty over natural resources. Final report of the Special Rapporteur" E/CN.4/Sub.2/2004/30 (13 July 2004), para. 43.
[316] ILO travaux report VI(1), p 63.
[317] Ibid., section "Land, environment and natural resources". See also MacKay (n 299), p 18.
[318] See Thornberry (n 122), p 356; see also Venne, in addressing the ILC Plenary, says that this "may render meaningless any guarantees to effectively protect our land rights". ILC record of proceedings, p 31/7.
[319] MacKay (n 299), pp 16 and 18.
[320] Doyle (n 286), p 183.
[321] Mackay (n 299), p 19.
[322] Article 13.1 and 13.2

animal life and other natural resources;[323] Venne even questions if "no one realizes that our relationship to the land is to a particular place(…) [i]n our worldview, the land which identifies us does not change like the wind", being something that cannot be compensated.[324]

In this context, Doyle notes the reluctance of the ILO bodies to engage with the implications of requiring FPIC in contexts beyond relocations, because of their rigid binary veto-no-veto approach, a position "which disconnects the requirement of FPIC from the rights which it serves to safeguard".[325] He also notes that the Convention is "silent on what should happen when potentially significant impacts on rights" are identified in impact assessment processes and consultations, and consent is not obtained,[326] which generates doubts and uncertainties about the effective protection of Indigenous peoples in these cases. As mentioned above, these possible threats to Indigenous peoples' way of life (including spiritual and cultural values) have the potential to be not only significant or serious, but of a substantive nature, jeopardizing their very survival as peoples. Thus, C169 fails to follow a precautionary approach, providing a weak degree of protection to Indigenous peoples. In these cases, this silence or lacuna can be addressed by the guidance provided by PP, taking into account its more flexible approach of 'the higher the risk the greater the need for precaution', clarifying and strengthening the protection of their rights. This could also influence the static conception of FPIC, moving from an understanding of FPIC as a 'veto power' in Article 16 to a more flexible approach, aligned with the PP, considering that, as noted by Barelli, Article 35 acknowledges that some provisions of the C169 could fall behind other international standards, implying that the standards of C169 can be subject to more progressive interpretations.[327]

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[323] Swespton (n 240), p 279; ILO travaux report VI(1), p 72.

[324] "But again, we return to the essential question: how much compensation can be paid to a people for the loss of their way of life? Can a lifestyle be returned to a people once it is destroyed?" Venne (n 217), p 63. See also MacKay (n 299), p 19.

[325] Doyle (n 286), p 174. The former Special rapporteur agrees with this position, noting that consultations and consent should not be seen as a right for Indigenous peoples to impose their will over legitimate public interests; in fact, they are aimed to avoid the imposition of the will of one party over the other. 2009 Report, paras. 48-49.

[326] Doyle (n 286), p 174.

[327] Barelli (n 171), p 265. Article 35 states that "The application of the provisions of this Convention shall not adversely affect rights and benefits of the peoples concerned pursuant to other Conventions

7. Assessment

The ILO Convention 169 constitutes a step forward for Indigenous peoples, explicitly recognising a variety of rights and clearly establishing a way to protect their way of life, the rights of participation and consultation, applicable both in situations of known and uncertain harm. This is especially important when it comes to the protection of their lands and the cultural/spiritual connection that they have with them, as the monitoring bodies have consistently required impact studies to assess possible spiritual, social, cultural and environmental risks, with Indigenous participation and in conjunction with consultations. This provides a more complete picture ('the best information available') of any potential threats, having then more instances to incorporate Indigenous knowledge in the decision-making process and identify risks, reduce uncertainties, interpret information and assess and discuss alternatives and mitigation measures. To do this, the ILO monitoring bodies' have relied on Article 15, sidestepping the 'whenever appropriate' qualification in Article 7.3, reflecting in my view an 'erring on the side of caution' approach.

Regarding consultations, the Convention establishes several requirements to ensure a genuine dialogue that allows Indigenous peoples to influence the outcome of the decision, and also subjecting this process to judicial oversight, resulting in the suspension or modification of projects that could have affected their rights. However, C169 stops short of requiring consent (a point criticised by Indigenous representatives), a notion understood as a 'veto power', strongly relying on the assumption that consultation's requirements and good faith constitute a sufficient safeguard. This may be accurate in certain cases, but it is insufficient when the potential threats to Indigenous peoples' way of life are of a substantive nature, jeopardising their survival as peoples; in these situations, stronger measures are needed to effectively protect their rights. Despite establishing in Article 16 that relocations cannot be conducted without Indigenous peoples' FPIC, which would ensure that their knowledge, concerns, suggestions and proposals are taken into account in decision-making, the C169 immediately undermines this enhanced

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and Recommendations, international instruments, treaties, or national laws, awards, custom or agreements."

safeguard, allowing States to circumvent it, following 'appropriate procedures established by national laws and regulations', ultimately giving States the final saying and failing to ensure that potentially devastating effects, physical and spiritual, will not take place. Similarly, in another situation that can have devastating effects, the exploration/exploitation of natural resources in Indigenous lands, the ILO bodies have remained silent about what to do if potentially serious or substantive effects are identified (including cultural/spiritual ones) and consent is not obtained. This indicates that, when it comes to FPIC, the C169 provides a weak degree of protection of Indigenous peoples' rights.

8. Concluding remarks

The UNTS system and the C169 have a central part in the protection of Indigenous peoples and their traditional way of life, recognising important rights and addressing their concerns through the work of the respective monitoring bodies. In doing this work, they rely on TK to understand and identify social, cultural and environmental threats that could affect Indigenous peoples in various circumstances, where there are often uncertainties (as they cannot be determined *in abstracto*), a knowledge that is integrated through their effective participation in decision-making processes. For the UNTS, this means 'consultations' (without specific requirements) to protect their cultural rights, with a focus on prevention of direct effects, although the bodies have displayed in some occasions an awareness of the need to act before the possible harm becomes imminent through impact assessments, albeit this is not uniform across the work of the bodies. The C169 for its part also establishes the duty to consult, with a series of requirements designed to ensure that Indigenous peoples are able to affect the outcome of the decision-making process. Moreover, these consultations are applicable from early on, which allows for the early identification of potential risks and, according to the ILO monitoring bodies, must be conducted in conjunction with impact studies to assess social, cultural, spiritual and environmental harm, reflecting in my view more clearly a precautionary approach that aims for the use of the best information available in order to adopt decisions. However, it would be difficult to argue that this approach is followed in situations where the threats to Indigenous peoples' traditional way life are of a substantive nature, jeopardising their survival as

peoples, thus requiring an enhanced safeguard like consent. In effect, the UNTS system has been very inconsistent, with one case in the complaint procedure where, due to the devastating environmental effects on the lives of the authors, FPIC was mentioned as a requirement, without clarifying its meaning or if this is a 'one-off' situation or a more permanent standard, being required in every case where the impacts are of a substantive nature. If this is the case, it is also unclear what would constitute 'substantive' nature and how is this applied when it comes to spiritual effects; as noted by Göcke and Yupsanis, among others, the HRC must still clarify these issues. The reporting procedure, where perhaps some degree of clarification could have been found (although Barelli mentions that it is not the ideal way to clarify the contours of questions like FPIC), provides conflicting information, sometimes requiring States to obtain FPIC and sometimes that they just 'seek' FPIC, even when the potential effects seems to be equally substantive, thus being unable to establish a general rule, creating some degree of uncertainty.

The C169 for its part conceives FPIC as a 'veto power', required in situations of relocation, which can have disastrous consequences foe Indigenous peoples, including their extinction; in this sense, it seems to establish a heightened safeguard for a higher threat, ensuring that their concerns and suggestions are taken into account in decision-making and that only the risks that they deem acceptable may materialise. However, C169 allows States to circumvent FPIC, giving them the final word, thus debilitating this protection, as mentioned by several authors, also noting how this grant States the power to have the final say, even in the face of Indigenous opposition. Similarly, it remains silent when it comes to another case where Indigenous peoples' traditional livelihood could be substantially, affected the exploration and exploitation of natural resources, being there a lacuna in a very important issue, as highlighted by Doyle.

In sum, both the UNTS and C169 provide a weak application of FPIC, undermining the effective protection of Indigenous peoples' rights, even in the face of potential threats that could affect their very survival.

The human rights instruments analysed here are not the only ones applicable to Indigenous peoples; there is also UNDRIP, adopted almost twenty years later than

C169, as well as the reinterpretation of regional instruments in the Inter-American System (including a more recent adoption of a Declaration specific to Indigenous peoples) and the African System. This is the focus of the next chapter.

Chapter V: The Protection of Indigenous Peoples' Rights in the UN Declaration on the Rights of Indigenous Peoples and the Inter-American and African Systems

1. Introduction

Indigenous peoples' traditional knowledge ('TK') plays an important role in identifying and avoiding potential threats of serious harm to Indigenous peoples' way of life, especially when it comes to projects and activities on their lands. In the previous chapter, I noted how this is reflected in its incorporation in decision-making processes (through consultations and impact studies), under the UN Treaty System ('UNTS') and the International Labour Organization Convention concerning Indigenous and Tribal Peoples in Independent Countries C169 ('C169').[1] However, due to inconsistencies in the practice of the UNTS, and C169's limited application of consent, some questions remain about the effective degree of protection that they provide to Indigenous peoples' rights, especially regarding possible impacts of a cultural/spiritual nature and those of a substantive nature. With this in mind, I analyse in this chapter the 2007 UN Declaration on the Rights of Indigenous Peoples ('UNDRIP'),[2] as well the development of Indigenous peoples' rights in the light of two regional human rights conventions: the 1969 American Convention on Human Rights[3] ('American Convention') and the African Charter on Human and Peoples' Rights ('African Charter').[4]

The interpretation and application of these instruments indicate an awareness of the need to anticipate the occurrence of harm, by ensuring the effective participation of Indigenous peoples in decision-making, considering their TK and

[1] Indigenous and Tribal Peoples Convention, C169, 27 June 1989, C169, entered into force 5 September 1991.
[2] UNGA, "UN Declaration on the Rights of Indigenous Peoples", 2 October 2007, A/RES/61/295.
[3] Organization of American States ('OAS'), American Convention on Human Rights, 22 November 1969, 1144UNTS123, entry into force 18 July 1978; 24 out of 35 OAS members are currently parties to this Convention.
[4] Organization of African Unity ('OAU'), African Charter on Human and Peoples' Rights (Banjul Charter), OAU Doc.CAB/LEG/67/3 rev.5, 21I.L.M.58(1982), entry into force October 21, 1986, ratified by almost all African Union Member States (except Morocco).

concerns. This is especially reflected in the inclusion of more situations where their free, prior and informed consent ('FPIC') is required, having then a stronger stance on this subject. UNDRIP for instance, explicitly requires FPIC in two situations and, depending on a more expansive or restricted view of the purpose of this Declaration, potentially a third, related to possible substantive effects on Indigenous peoples' lands and cultural values. The Inter-American and African Systems for their part seem to follow a 'sliding-scale approach', requiring FPIC in consideration to the effects of large-scale projects on Indigenous lands, based on an interpretation of the rights to property (American Convention) or similar interrelated rights (African Charter) by the supervisory bodies. That being said, the more recent jurisprudence of the Inter-American Court of Human Rights ('IACtHR') raises some questions about the actual application of this FPIC safeguard, especially in situations of substantive harm on spiritual/cultural values. In addition, there is an interesting contrast between the African Commission on Human and Peoples' Rights ('ACHPR'), which adopted a very strong position vis-à-vis Indigenous participatory rights (including FPIC), and the African Court on Human and Peoples' Rights ('ACtHPR') which, in a more recent case, has declined to address these issues in detail, omitting any mention of FPIC, creating some uncertainty about the standards applicable.

All this means that, albeit having overall better guarantees to protect Indigenous peoples' rights in the face of potentially non-negligible harm than the UNTS and C169, there are still some remaining issues that could weaken this protection, mostly derived from controversies about self-determination and control over natural resources and lands, which are important to explore.

This chapter is divided in 4 sections; sections two analysis UNDRIP, starting with its legal status and influence in international law, moving then into the issue of participatory rights and some controversies surrounding consent, especially regarding extractive projects. Section three deals with the protection of Indigenous peoples' rights under the American Convention (section 3.1), focusing on the jurisprudence of the IACtHR in regard to participatory rights and the questions surrounding the adequate protection of spiritual/cultural values. Section 3.2 deals with the African Charter and the different approaches adopted by its supervisory

bodies, especially in the issue of FPIC. Section four ends this chapter with some concluding remarks.

2. The United Nations Declaration on the Rights of Indigenous Peoples

The UNDRIP is considered the "most advanced and comprehensive international instrument on Indigenous peoples' rights" [5] and a milestone of Indigenous empowerment, [6] recognising several Indigenous rights such as (internal) self-determination; [7] self-government; [8] self-identification; [9] collective rights; [10] land rights[11] and the special relationship with their territories;[12] and traditional cultural[13] and economic[14] activities, among others. Its origin can be traced back to the 1982 Working Group for Indigenous Populations ('WGIP'), [15] then to the open-ended working group established to present the Declaration during the International Decade of the World's Indigenous People (1995-2004)[16] and its final adoption in 2007 by the UNGA, approved with 144 votes in favour, 11 abstentions and 4 votes against (Australia, Canada, New Zealand and the United States; all of them later supported the Declaration).[17] It is greatly influenced by the C169[18] (going beyond it in some aspects, like consent), and throughout its drafting process Indigenous peoples were

[5] M. Fitzmaurice, "The 2007 United Nations Declaration on the Rights of Indigenous Peoples", Austrian Review of International and European Law 17: 139-266, 2012, pp 139-141.
[6] S. Wiessner, "The Cultural Rights of Indigenous Peoples: Achievements and Continuing Challenges", EJIL Vol.22no.1 (2011), p 130.
[7] UNDRIP, Articles 3-4 and 46.1 See also R. Stavenhagen, "Making the Declaration on the Rights of Indigenous Peoples Work: The Challenge Ahead" in S. Allen and A. Xanthaki (eds), *Reflections on the UN Declaration on the Rights of Indigenous peoples* (Hart publishing, 2011), p 163.
[8] UNDRIP, Article 4.
[9] Ibid., Article 33.
[10] Ibid., preamble and Article 1, among others.
[11] Ibid., Articles 10 and 25-30, among others.
[12] Ibid., preamble and Article 25.
[13] Ibid., Articles 11-16, 24 and 31, among others.
[14] Ibid., Article 20.
[15] ECOSOC Resolution 1982/34. See also P. Thornberry, *Indigenous Peoples and Human Rights"* (Manchester University Press, 2002), p 371 and J. Anaya and L. Rodriguez-Piñeiro, "The Making of the UNDRIP" in J. Hohmann and M. Weller (eds) *The UN Declaration on the Rights of Indigenous Peoples: A Commentary* (OUP, 2018).
[16] Commission on Human Rights, resolution 1995/32.
[17] See Anaya and Rodriguez-Piñeiro (n 15), p 60.
[18] Ibid., p 45; L. Swepston, "Indigenous and tribal peoples' culture and work under the ILO" in C. Lennox and D. Short (eds), *Handbook of Indigenous Peoples' Rights* (Routledge, 2016), p 343 noting that "UNDRIP was built in large part on the foundation of Convention 169"; and J. Anaya, "Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous People", 11 August 2008, A/HRC/9/9 ('2008 Report'), para. 43.

involved, influencing the final text and allowing them to incorporate issues and questions that "are otherwise not reflected in states' foreign policy positions",[19] contributing to enhance the legitimacy of the Declaration.[20] Nevertheless, and as mentioned below, the final result was a compromise between their aspirations, experts' advice and States' goodwill.[21]

2.1 Legal status of the Declaration

It has been argued that some provisions of UNDRIP constitute customary law, like those regarding self-determination; cultural rights and identity; and the right to their traditional lands, territories and resources, among others,[22] which is controversial. Countries like Australia and New Zealand for example stated during the UNDRIP vote that this Declaration cannot be cited as evidence of customary law;[23] and some authors noted that UNDRIP is non-binding in character, and "some if not the majority of its provisions do not represent customary international law or are emergent rules, in the process of crystallization".[24]

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[19] C. Charters, "The Legitimacy of the UN Declaration on the Rights of Indigenous Peoples" in C. Charters and R. Stavenhagen, *Making the Declaration Work: The UN Declaration on the Rights of Indigenous Peoples* (IWGIA 2009), p 286.

[20] Ibid. See also C. Tennant, "Indigenous Peoples, International Institutions, and the International Legal Literature from 1945-1993" Human Rights Quarterly, Vol. 16, No. 1 (1994), p 49 noting that "the greater the participation by indigenous peoples in an institutional process, the more legitimate are the process and its results", and M. Barelli, *Seeking Justice in International Law: The significance and implications of the UN Declaration on the Rights of Indigenous Peoples* (Routledge, 2016), pp 51-52.

[21] J. Burger, "The UN Declaration on the Rights of Indigenous Peoples: From Advocacy to Implementation" in Allen and Xanthaki (n 7), p 42.

[22] See, among others, International Law Association ('ILA'), "Resolution 5/2012, Rights of Indigenous Peoples" (2012), "Conclusions" paras. 2-10; J. Anaya and S. Wiessner, 'The UN Declaration on the Rights of Indigenous Peoples: Towards Re-empowerment' Jurist (3 October 2007); Anaya and Rodriguez-Piñeiro (n 15), p 62; and M. Scheinin and M. Ahren, "Relationship to Human Rights, and Related International Instruments" in Hohmann and Weller (n 15), p 64; and V. Tauli-Corpuz, "Report of the Special Rapporteur of the Human Rights Council on the rights of indigenous peoples", 21 July 2017, A/72/186 ('2017 Report'), para. 9.

[23] UNGA Department of Public Information, "General Assembly adopts Declaration on Rights of Indigenous Peoples", 13 September 2007, ('UNDRIP press release'). https://www.un.org/press/en/2007/ga10612.doc.htm [accessed August 2020], explanation of vote by the representatives of Australia and New Zealand.

[24] Fitzmaurice (n 5), p 156. The larger discussion about the possible customary character of Indigenous peoples' rights is outside the scope of this research; in any case, and as noted by Voyiakis, during the voting process States "were not explicitly asked to take a view on the current status of those rights under customary law or on the desirability of those rights becoming part of customary law in the future." E. Voyiakis, "Voting in the General Assembly as Evidence of Customary International Law?" in Allen and Xanthaki (n 7), p 210.

Formally, this Declaration can be considered as soft law, that is, a non-legally binding instrument,[25] as emphasized by some States during its adoption.[26] This, however, does not mean that the Declaration lacks legal importance. In effect, and as also mentioned in chapter II, soft-law instruments are carefully negotiated to accommodate different views, involving an important degree of good faith commitments;[27] in this sense, UNDRIP is one of the most extensively negotiated texts in UN history. In effect, it was discussed for almost a quarter of a century,[28] going through various stages and forms, approved or considered by multiple bodies, such as the WGIP; the UN Commission on Human Rights; the UN Open-Ended Inter-sessional Commission on Human Rights Working Group on the draft Declaration on the Rights of Indigenous Peoples (comprised of States with Indigenous peoples' participation) and the UNGA, among others.[29] This illustrates the long but ultimately successful effort to "produce a document capable of responding to the claims of indigenous peoples while remaining acceptable to States and in accordance with international law",[30] reflected in the widespread support received at the time of the voting and beyond. This is important because "as a resolution adopted by the General Assembly with the approval of an overwhelming majority of Member States, the Declaration represents a commitment on the part of the United Nations and Member States to its provisions".[31]

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[25] A. Boyle, "Soft law in international law-making", in M. Evans (ed), *International Law* (5th ed, OUP 2018), p 121, mentioning UNGA resolutions as an example of soft-law instruments. See also Stavenhagen (n 7), p 151; and S. Allen, "The UN Declaration on the Rights of Indigenous Peoples and the Limits of the International Legal Project" in Allen and Xanthaki (n 7), p 225 arguing that UNDRIP's significance comes from its political legitimacy rather than its legal character.

[26] See UNDRIP press release, explanations accompanying the votes from the representatives of Australia, Canada, Guyana, and Turkey, among others.

[27] See Chapter II, section 2; see also ILO, "ILO standards and the UN Declaration on the Rights of Indigenous Peoples: Information note for ILO staff and partners", p 2, noting that UNDRIP, as a UNGA Declaration, "reflects the collective views of the United Nations which must be taken into account by all members in good faith."

[28] Anaya and Rodriguez-Piñeiro (n 15), p 49.

[29] C. Charters, "Use It or Lose It: The Value of Using the Declaration on the Rights of Indigenous Peoples in Māori Legal and Political Claims" in A. Erueti, *International Indigenous Rights in Aotearoa New Zealand* (Victoria University of Wellington Press, 2017), pp 143-144.

[30] Barelli (n 20), p 49.

[31] 2008 Report, para 41; C. Baldwin and C. Morel, "Using the United Nations Declaration on the Rights of Indigenous Peoples in Litigation" in Allen and Xanthaki (n 7), pp 122-123. See also Boyle (n 25), pp 120-121, saying that "widespread acceptance of soft law instruments will tend to legitimize conduct and make the legality of opposing positions harder to sustain." The Office of Legal Affairs of the UN Secretariat remarked that when the GA opts to adopt an instrument in the Declaration format, there is 'a strong expectation that Members of the international community will abide by it'. See UN Doc E/CN.4/L.6101-2(1962).

Furthermore, UNDRIP's provisions relate to existing law previously accepted and implemented in international law, such as cultural rights; the special relationship that Indigenous peoples' have with their lands; and the rights of consultation and participation, among others, are recognised in the UNTS, C169 and the Biodiversity regime, discussed in previous chapters. Also, Article 3 states that Indigenous peoples have the right to self-determination, using the same language as Article 1 of the International Covenant on Civil and Political Rights ('ICCPR') and the International Covenant on Economic, Social and Cultural Rights, and building upon the jurisprudence of the Human Rights Committee ('HRC') and the Committee on Economic, Social and Cultural Rights, as noted in Chapter IV; among other examples. Even in those cases where UNDRIP goes beyond existing legal standards, this is built on the practice of judicial and quasi-judicial bodies like the UNTS bodies and regional systems (see below), being this expansion "in accordance with the ongoing evolution of the respective legal standards".[32] All this strengthens its character as an authoritative and legitimate instrument.[33]

Finally, and unlike the UNTS, UNDRIP does not have specific monitoring bodies to ensure compliance; however, Article 42 establishes that UN bodies (expressly mentioning the UN Permanent Forum on Indigenous Issues, UNPFII), specialised agencies and States "shall promote respect for and full application of the provisions of this Declaration", reflecting an approach that focuses on how to make the rights recognised in UNDRIP effective.[34] The UNPFII works as an advisory body, with a mandate to discuss Indigenous issues and provide expert advice and recommendations, and promote the integration and coordination of activities within the UN, among other things.[35] In 2008, it adopted UNDRIP as its legal framework,[36] and has encouraged States and international bodies to implement its standards and objectives.[37]

[32] Barelli (n 20), pp 54-55; Anaya and Rodriguez-Piñeiro (n 15), p 61; Charters (n 29), pp 145-146, among others.
[33] Barelli (n 20), p 55.
[34] L. Rodriguez-Piñeiro, "'Where Appropriate': Monitoring/Implementing of Indigenous Peoples' Rights under the Declaration" in Charters and Stavenhagen (n 19), p 329.
[35] UN Economic and Social Council Resolution 2000/22, ('ECOSOC'), 28 July 2000.
[36] UNPFII "Report of the Seventh Session" UN Doc E/C.19/2008/23, para. 131.
[37] See for instance, UNPFII, "Report of the sixteenth session" UN Doc E/C.19/2017/11, paras. 14-15.

Among the UN bodies included in Article 42, there are two that play a critical role in this context. First, there is the Special Rapporteur on the Rights of Indigenous Peoples,[38] whose original mandate of promoting and protecting the rights of Indigenous peoples was extended to include the promotion of UNDRIP in 2007.[39] This is achieved through the production of annual thematic[40] and country-specific reports, bringing attention to important issues and including recommendations to advance the protection of Indigenous peoples' rights, as well as compliance with the Declaration standards.[41] The mandate also includes the promotion of best practices regarding the effective protection of the rights of Indigenous peoples,[42] an aspect addressed by the Special Rapporteur by focusing on the implementation of UNDRIP's standards, providing assistance for legal reforms and monitoring the implementation of recommendations previously made by the Special Rapporteur (including follow-up visits), among others.[43]

The second mechanism is the Expert Mechanisms on the Rights of Indigenous Peoples ('EMRIP'), established by the Human Rights Council to provide thematic expertise on the rights of Indigenous peoples, mainly through studies and research;[44] provide expertise and advice on Indigenous peoples' rights "as set out" in UNDRIP, and assist States, "in achieving the ends of the Declaration through the promotion, protection and fulfilment of the rights of indigenous peoples."[45] To do this, the EMRIP prepares annual studies on the status of Indigenous peoples' rights "in the achievement of the ends of the Declaration", including challenges, good practices and recommendations.[46] This is reflected for instance in the 2018 study on FPIC, which aims to contribute to a better understanding of FPIC in the context of practices

[38] Established by the Commission on Human Rights Resolution 2001/57.
[39] Human Rights Council, "Promotion and protection of all human rights, civil, political, economic, socials and cultural rights, including the right to development" UN Doc. A/HRC/6/L.26 (25 September 2007). This was renewed by Resolution 42/20, UN Doc. A/HRC/RES/42/20 (8 October 2019) para 1(g).
[40] See for instance, 2017 Report.
[41] Barelli (n 20), p 57. See for example, V- Tauli-Corpuz, "Report of the Special Rapporteur on the rights of Indigenous peoples: visit to Ecuador", A/HRC/42/37/Add.1 (4 July 2019).
[42] Resolution 42/20 para. 1(a).
[43] See website "About the mandate of the Special Rapporteur for indigenous peoples" https://www.ohchr.org/EN/Issues/IPeoples/SRIndigenousPeoples/Pages/Mandate.aspx [accessed October 2020].
[44] Human Rights Council Resolution 6/36 of 14 December 2007, para. 1.
[45] Human Rights Council Resolution 33/25 of 5 October 2016, para. 1.
[46] Ibid., para 2.

and interpretations of these rights as enshrined in the Declaration,[47] including an annex with recommendations to other international institutions and States.[48] Finally, UNDRIP is referenced by international courts and bodies as a legal basis to justify decisions,[49] and it influences the work of other institutions,[50] as well as national law.[51]

In sum, UNDRIP is a vital milestone, negotiated in a way that accommodates and balances different views and interests of States and Indigenous peoples, establishing certain minimum standards regarding the content of Indigenous peoples' rights,[52] in line with existing instruments and practice and that also relate to various ongoing developments in international law. Despite being formally a soft-law instrument, it has an important normative weight, influencing the conduct and policies of States and international institutions (supported by the work of the Special Rapporteur and EMRIP), becoming an authoritative reflection of an international consensus regarding Indigenous peoples' rights.[53]

2.2 The protection of Indigenous peoples' traditional way of life

The Declaration recognises the particularities of Indigenous peoples' traditional way of life, based on a special relationship with their environment; for instance, the Preamble mentions that Indigenous peoples' control over their lands, territories and resources will enable them to maintain their institutions, culture and traditions, and that their rights "derive from their political, economic and social structures and from

[47] Study of the Expert Mechanism on the Rights of Indigenous Peoples, "Free, prior and informed consent: a human rights-based approach", A/HRC/39/62 (10 August 2018) ('EMRIP Report 2018'), para 2.
[48] Ibid., annex "Expert Mechanism advice No 11 on indigenous peoples and free, prior and informed consent.
[49] See section 3 below, and ACHR, "Advisory Opinion of the African Commission on Human and Peoples' Rights on the UN Declaration on the Rights of Indigenous Peoples", 41st Ordinary Session, Accra, Ghana (May 2007), among others
[50] See for instance Food and Agriculture Organization, "FAO Policy on Indigenous and Tribal Peoples" (2nd edition, March 2015).
[51] See F. Gómez, "The UNDRIP: an increasingly robust legal parameter" International Journal of Human Rights 23(1-2)(2019), p 9; M. Barelli, "Free, Prior and Informed Consent in the UNDRIP" in Hohmann and Weller (n 15), pp 265-267, among others.
[52] 2017 report para. 9; Charters (n 29), p 144; UNDRIP, Article 43: "The rights recognized herein constitute the minimum standards for the survival, dignity and well-being of the Indigenous peoples of the world."
[53] 2008 Report, para. 43; Anaya and Rodriguez-Piñeiro (n 15), p 62; Gomez (n 51), p 10; Barelli (n 51), p 67; Rodriguez -Piñeiro (n 34), pp 336-337.

their cultures, spiritual traditions, histories and philosophies, especially their rights to lands, territories and resources".[54] Article 25 recognises the existence of a special spiritual relationship between Indigenous peoples and their lands, territories and natural resources, including the 'cultural relationship' that they have with these territories and all the associated practices and traditions,[55] which, as mentioned in the previous chapter, cannot be determined *in abstracto* and depend on their own location, circumstances and experiences (being then some degree of uncertainty about them);[56] among other examples.

The Declaration uses more often the terms 'lands', 'territories' and 'resources' than 'environment'; however, these notions should be interpreted broadly, as including the physical and symbolic space in which Indigenous culture has developed.[57] Charters also notes that 'territories' was included in UNDRIP in an effort to best reflect the special relationship between Indigenous peoples and these spaces,[58] with important social, cultural, economic, religious and environmental aspects deeply intertwined,[59] as also emphasised during the drafting process by the Chairperson of the WGIP, pointing out that "the term 'territory' (…) conveys some notion of the totality of indigenous peoples' relationship to the land and to all of its resources and characteristics.", a relationship that must be understood as "a special and comprehensive kind of relationship that is historical, spiritual, cultural and collective."[60]

In any case, UNDRIP recognises that Indigenous peoples have the right to the conservation and protection of their territories, for which States "shall establish and implement assistant programmes (…) for such conservation and protection,

[54] UNDRIP, Preambular paras. 7 and 10.
[55] C. Charters, "Indigenous Peoples' Rights to Lands, Territories, and Resources in the UNDRIP: Articles 10, 25, 26, and 27" in Hohmann and Weller (n 15), p 411.
[56] See Chapter IV, section 3.3.
[57] A. Regino and G. Torres, "The United Nations Declaration on the Rights of Indigenous Peoples: The Foundation of a New Relationship between Indigenous Peoples, States and Societies" in Charters and Stavenhagen (n 19), pp 160-161
[58] Charters (n 55), p 406.
[59] UNCHR, Report of the Working Group Established in Accordance with Commission on Human Rights
Resolution 1995/32, UN Doc E/CN.4/2002/98 (6 March 2002) para 38. See also Chapter III.
[60] UN Sub-Commission on the Promotion and Protection of Human Rights, "Explanatory Note Concerning the Draft Declaration on the Rights of Indigenous Peoples", UN Doc E/CN.4/Sub.2/1993/26/Add.1 (19 July 1993).

without discrimination".[61] Errico highlights that this encompass the prevention of environmental damage, and that negotiations regarding UNDRIP were conducted "against the backdrop of increasing international attention to environmental issues",[62] being the implication that environmental law obligations and principles are applicable here, including the precautionary principle.

This comprehensive approach means that the safeguards established by UNDRIP to protect Indigenous peoples' rights, consultation and participation,[63] cover every aspect of their lives, as I will analyse below.

2.2.1 Participation

The right to participate is an expression of self-determination,[64] also linked to consultation, as the latter would also be a way to express the former,[65] allowing Indigenous peoples to influence decision-making processes, as noted in the previous chapter. Like in C169, participation is included throughout the Declaration, seeking to put an end on the historical exclusion of Indigenous peoples in decision-making,[66] in both general and particular situations; an example of the former is Articles 5 and 18, recognising Indigenous peoples' right to participate within their distinct political, legal, economic, social and cultural institutions (internal decision-making) and in the political, economic, social and cultural life of the State "if they choose to" (external decision-making).[67] In addition, Articles 23 and 32.1 recognise Indigenous peoples' right to determine their own priorities for development, including social and

[61] UNDRIP, Article 29.1
[62] S. Errico, "Control over Natural Resources and Protection of Indigenous Territories" in Hohmann and Weller (n 15), p 451.
[63] 2017 report, paras. 22 and 62, noting that UNDRIP's implementation requires the full and effective participation of Indigenous peoples, and that consultation is an essential safeguard to protect Indigenous peoples' rights. See also EMRIP Report 2018, paras. 14-19.
[64] Burger (n 21), pp 43 and 46-48; EMRIP Report 2018, para. 14. According to the drafting history, for several States self-determination meant participatory rights. H. Quane "The UN Declaration on the Rights of Indigenous Peoples: New Directions for Self-Determination and Participatory Rights?" in Allen and Xanthaki (n 7), p 286.
[65] Burger (n 21), p 48 and Quane (n 64), p 273. See also EMRIP Report 2018, para 14.
[66] EMRIP Report 2018, para. 17.
[67] UNDRIP, Articles 5 and 18. See also B. Gunn, *Understanding and Implementing the UN Declaration on the Rights of Indigenous Peoples, an Introductory Handbook* (Indigenous Bar Association, 2011), p 19. See ILA, "Rights of Indigenous Peoples Interim Report" (The Hague 2010), ('ILA Report 2010'), p 14 mentioning that participation has to be effective so Indigenous peoples can influence the decision.

economic programmes, and the use of their lands, territories and other resources, respectively. More specific scenarios in which their participation is required are the implementation of a fair, independent, impartial, open and transparent process in conjunction with States to recognise Indigenous rights to lands (Article 27) and regarding contacts and relations between Indigenous peoples across borders (Article 36). It is also required in specific circumstances related to the environment, like assistance programmes to conserve and protect the Indigenous environment (Article 29); and measures to mitigate adverse environmental, economic, social, cultural or spiritual impacts (Article 32.3). However, and despite the fact that UNDRIP goes further than C169 and explicitly recognises Indigenous peoples' rights over natural resources (like flora and fauna[68] and minerals[69]) and, as mentioned before, strongly acknowledges the special relationship that they have with their lands and territories, there are no explicit references to conducting impact studies with Indigenous participation to "assess social, spiritual, cultural and environmental impacts",[70] not even in Article 32.2, which refers to the case of exploration/exploitation of natural resources in Indigenous lands (where consultations are required).[71]

This seems an unusual omission, considering the potentially serious effects on Indigenous peoples' economic, social, spiritual and cultural rights and environment, which can only be properly identified and addressed with their participation and knowledge, especially those of a spiritual and cultural nature;[72] the influence of C169 in UNDRIP and the important role that these studies have for consultations and in avoiding the materialisation of potential harm;[73] and the several references to the protection of cultural sites[74] and lands, territories and natural resources[75] in UNDRIP, to which a mechanism like impact studies is clearly

[68] UNDRIP Article 24, recognising the rights to conserve their vital medicinal plants and animals.
[69] Ibid. and Article 32.2 where the duty to consult when it comes to any project affecting their lands or territories and other resources is established, especially regarding "the development, utilization or exploitation of mineral, water or other resources." See also J. Gilbert and C. Doyle, "A New Dawn over the Land: Shedding Light on Collective Ownership and Consent" in Allen and Xanthaki (n 7), p 302.
[70] C169, Article 7.3. See Chapter IV section 6.1.
[71] UNDRIP, Article 32.2.
[72] As noted in previous chapters.
[73] See Chapter IV section 6.1-6.2 and section 3.1 below. See also V. Tauli-Corpuz, "Report of the Special Rapporteur on the rights of indigenous peoples", A/HRC/45/34 (18 June 2020)('2020 Report'), para 58.
[74] UNDRIP Articles 11 and 12, among others.
[75] Ibid., Articles 26 and 29, among others.

relevant. Considering this, it can be argued that, similar to the situation of C169 Article 15.2, the requirement of 'appropriate measures' to mitigate adverse environmental, economic, social, cultural or spiritual impacts in the case of extractive activities in Article 32.3 refers to impact studies, established precisely to determine possible impacts and avoid and mitigate their effects, as noted in previous chapters (following a precautionary approach), as it cannot be a reference to consultations, mentioned in Article 32.2. This is also the view of several authors.[76]

In addition, the Declaration establishes that Indigenous peoples' FPIC is an objective of consultations (see below), and in certain cases, a requirement. In order for this consent to be 'informed' and conduct reliable consultation processes, it is necessary to conduct "independent and impartial social, cultural and environmental impact studies that cover the full spectrum of rights that could be affected by a measure or project".[77] Similarly, the former Special Rapporteur James Anaya noted that it is "essential for the State to carry out environmental and social impact studies" to have a full and objective assessment of potential and expected consequences about the different ways in which a project could affect Indigenous peoples' livelihood, in order to make an informed decision.[78] This understanding of impact studies as an element of 'informed consent' has also been acknowledged by the EMRIP,[79] and several authors.[80]

Although TK is not mentioned in the context of participation (it is in regards to cultural heritage, seemingly in a context of something that requires protection),[81] the preamble recognises that Indigenous knowledge, cultures and practices contribute to sustainable development and the proper management of the environment [82]

[76] J. Pasqualucci, "Critique of the jurisprudence of the Inter-American Court of Human Rights in light of the United Nations Declaration on the Rights of Indigenous Peoples", 27Wis.Int'lL.J.51 2009-2010, pp 93-94, saying that one way to mitigate impacts is determine them in advance; J. Anaya and S. Puig, "Mitigating State Sovereignty: The Duty to Consult with Indigenous Peoples" Arizona Legal Studies Discussion Paper No.16-42, p 25, saying that mitigation measures should be based on impact studies made with Indigenous participation; and Errico (n 62), pp 448-449.
[77] 2020 Report, para. 58. See also E. Stamatopoulou, "Taking Cultural Rights Seriously: The Vision of the UN Declaration on the Rights of Indigenous Peoples", in Allen and Xanthaki (n 7), p 410.
[78] J. Anaya, "Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous People", UN Doc. A/HRC/12/34, 15 July 2009, ('2009 Report'), paras. 53 and 70.
[79] EMRIP Report 2018, para. 22.
[80] Burger (n 21), p 49; Barelli (n 51), pp 250-251; Errico (n 28), p 452, among others.
[81] UNDRIP, Article 31, analysed below.
[82] Ibid., preamble.

implicitly recognising the importance of this knowledge in avoiding serious harm to their lands and, subsequently, to their traditional way of life.[83] Moreover, the Special Rapporteur highlights that Indigenous peoples' participation in impact studies is essential to identify possible impacts and ways to avoid them,[84] which requires the use of TK. In effect, it would be very difficult for States to find out which areas or resources are of cultural/spiritual and/or historical significance and the risks that they face, including sacred sites and animals, without the assistance of Indigenous peoples, also considering that TK provides an holistic understanding ('the best information available') about their traditional way of life. Thus, it is clear that TK plays an important role in the avoidance of potential harm through impact studies, especially cultural/spiritual effects.

2.2.2 Consultation

UNDRIP requires States to "consult and cooperate in good faith" with Indigenous peoples, "in order to obtain" their FPIC, before adopting and implementing legislative or administrative measures that may affect them,[85] that is, when their particular interests or conditions are implicated in the decision.[86] A literal interpretation would mean that consultations are applicable only in situations of uncertainty (i.e., 'may' affect them) but this would restrict its scope, so it makes more sense to interpret this as a way to cover as much scenarios as possible, including preventive situations. Certain particular cases where consultations are required are in adopting measures to combat discrimination (Article 15.2); before the use of Indigenous lands for military activities (Article 30) or before the approval of "any project affecting their lands or territories and other resources, particularly in

[83] Ibid. See also T. Stoll, "Intellectual Property and Technologies" in Hohmann and Weller (n 15), p 312, noting that Indigenous knowledge is also important for impact assessments, among other things, as recognised by the Akwe: Kon Guidelines (analysed in Chapter II section 6.2).
[84] Report 2020, para 58.
[85] UNDRIP, Article 19.
[86] 2009 Report, para. 43.

connection with the development, utilization or exploitation of mineral, water or other resources".[87]

This duty to consult and cooperate has the aim to build a dialogue in good faith, leading to a mutual understanding and consensual decision-making,[88] being a process that does not occur at a single moment in time but extends over the course of a project or measure.[89] As such, it would allow Indigenous peoples to incorporate their concerns and perspectives, based on their own knowledge and experiences, regarding possible risks and threats to their way of life and how to address them,[90] including cultural and spiritual effects, influencing the outcome of the decision.[91] To ensure this, Article 19 establishes stringent obligations to have 'meaningful consultations',[92] which are:

- they shall be conducted before adopting/implementing legislative or administrative measures that may affect Indigenous peoples, so they are involved as early as possible in the process, having enough time to understand and analyse the information, engage in their own decision-making processes,[93] and influence the outcome, which cannot be done when the decisions are already made;[94]
- in good faith, which requires a climate of confidence and mutual respect that favours productive dialogues, creating the conditions to achieve an agreement;[95]
- through Indigenous' representative institutions, established through their own decision-making procedures;[96] and
- with the aim to obtain their consent, which is then an objective and not a requirement, except in certain situations (see below).

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[87] UNDRIP, Article 32.2. Other instances of consultations can be found in Article 17 (protection of Indigenous children), and Article 36.2 (measures to maintain relations with their own members across boundaries), among others.
[88] 2009 Report, para. 49.
[89] EMRIP Report 2018, para. 15.
[90] Ibid., para. 34. J. Anaya, "Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous Peoples, Extractive industries and Indigenous peoples", 1 July 2013, A/HRC/24/41 ('2013 Report'), para. 59, noting that consultations allow them to "actively contribute to the prior assessment of all potential impacts of the proposed activity, including the extent to which their substantive rights and interests may be affected. Additionally, consultation procedures are key to the search for less harmful alternatives or in the definition of mitigation measures."
[91] EMRIP Report 2018, para. 15; see also 2009 Report, para 46.
[92] Barelli (n 20), p 37.
[93] EMRIP Report 2018, para. 21(a) and (b).
[94] 2009 Report, para 46.
[95] Ibid., para 50. EMRIP Report 2018, para. 20(a) and (b).
[96] 2009 Report, para. 52. EMRIP Report 2018, para. 20(c).

Article 19 does not require consultations to be conducted 'through appropriate procedures'; this requirement is present in Article 18, referring to participation in decision-making, but applies to consultations[97] and provides a degree of flexibility, as there is no 'single model' of consultations,[98] considering the various circumstances where they are required, the nature of the measure and the specific ways in which Indigenous peoples organise. That being said, consultations procedures themselves should be the product of consensus,[99] contributing to create a climate of trust and respect, and protecting Indigenous peoples from arbitrariness, 'informative meetings' and proforma consultations.[100]

In sum, consultations have detailed requirements that would enable Indigenous participation and influence in the decision-making process; this, together with impact assessments, allows them to incorporate their TK, perspectives and alternatives to protect their social, cultural, economic, political and spiritual aspects of their way of life, as well as their lands and resources, from possible and known harms, constituting the best information available to anticipate potentially serious effects on their livelihood.[101] What still remains to be analysed is if UNDRIP considers the situation of potential substantive threats, involving a stronger safeguard, consent.

2.2.3 Consent

The Declaration refers to consent in various Articles, although in some of them (like Articles 19 and 32), the wording used leaves ample space for interpretation, reflecting the tensions during the negotiation process between States and Indigenous peoples,[102] requiring a more cautious and flexible approach to this issue.[103]

[97] ILA Report 2010, p 14.
[98] 2009 Report, para. 45.
[99] Ibid., para 51; EMRIP Report 2018, para. 20(d).
[100] Anaya and Puig (n 76), p 23; 2009 Report, para. 46.
[101] EMRIP Report 2018, para. 34: "Indigenous peoples should have a major role in establishing whether the measure or project affects them at all and, if it does, the extent of the impact. Indigenous peoples may highlight possible harms that may not be clear to the State or project proponent, and may suggest mitigation measures to address those harms."
[102] Barelli (n 51), pp 248-249; D. Newman, "Interpreting FPIC in UNDRIP", International Journal on Minority and Group Rights 27 (2019), p 235.
[103] Barelli (n 51), p 251.

The Declaration itself does not clarify the meaning of FPIC; however, following a report from the UNPFII, it can be argued that:

- 'free' implies that the process to obtain consent should be without coercion, intimidation or manipulation;
- 'prior', refers to seeking consent sufficiently in advance of any authorization or the initiation of activities, respecting Indigenous decision-making processes; and
- 'informed' means that a certain minimum of information must be provided, covering at least the nature, pace, reversibility and size of the proposed project/activity; its purpose, duration and location affected; personnel involved; procedures that it may entail; and "a preliminary assessment of the likely economic, social, cultural and environmental impact, including potential risks(…) *in a context that respects the precautionary principle*"[emphasis added].[104] This reaffirms the notion that impact studies are incorporated in UNDRIP, mentioned above.

Interestingly, there is no elaboration on the word 'consent'; its ordinary meaning refers to the idea of "permission to do something",[105] but Article 19 (and 32.2) refers to consultations "in order to obtain" consent, an expression that according to the Special Rapporteur, should not be understood as giving Indigenous peoples a general 'veto power' over decisions that could affect them,[106] moving away from the 'binary veto-non-veto' approach of C169. This is also supported by the different wording used in situations of relocation and storage of hazardous materials in Indigenous lands, that 'shall' not take place "without their free, prior and informed consent", thus being consent a requirement (see below); and also the drafting history of Article 19, which originally had a more mandatory text, i.e., "States shall obtain" Indigenous peoples' FPIC,[107] changed at the proposal of the Chairman of the Working Group due to concerns expressed by States about a perceived 'right to veto'.[108] All this

[104] UNPFII, "Report on Free, Prior and Informed Consent", UN Doc.E/C.19/2005/3, 17 February 2005, p 12. This is very similar to C169.

[105] Oxford online dictionary https://www.oxfordlearnersdictionaries.com/definition/english/consent_1?q=consent [accessed November 2020].

[106] 2009 Report, paras. 46 and 48.

[107] See Report of the working group established in accordance with Commission on Human Rights resolution 1995/32 on its eleventh session" E/CN.4/2006/79 (22 March 2006) Annex I Article 20.

[108] Ibid. See for instance "Report of the working group established in accordance with Commission on Human Rights resolution 1995/32" (10 December 1996) E/CN.4/1997/102 para 227, where the Norway representative mentioned that Article 20 was sometimes interpreted as granting a right to veto, requiring clarification. See also S. Errico "The Controversial Issue of Natural Resources:

implies that, according to UNDRIP's text, there is no absolute obligation to obtain consent, being generally an objective of the consultation process.[109] This does not mean that States can simply move forward with measures that could affect Indigenous peoples' way of life and environment; States still have to consult Indigenous peoples, a process that aims to avoid "the imposition of the will of one party over the other",[110] following a series of stringent requirements. As noted above, this allows Indigenous peoples to influence the outcome of the decision-making process,[111] providing some degree of protection to their rights.

In any case, there are two clear situations where UNDRIP expressly precludes States from taking certain actions in the absence of Indigenous FPIC. The first one is Article 10, relocation (which could have potentially disastrous effects on Indigenous peoples' way of life and survival, as discussed in the context of C169),[112] establishing that Indigenous peoples "shall not be forcibly removed from their lands or territories. No relocation shall take place without the free, prior and informed consent of the Indigenous peoples concerned(…)".[113] Unlike C169, UNDRIP does not contemplate a possibility to circumvent this,[114] although cases of *force majeure* or necessity still apply.[115] The second situation is Article 29.2, by which States cannot store or dispose of hazardous materials in Indigenous lands "without their free, prior and informed consent". The possible effects of this situation are long-lasting, affecting not only the environment but also the current and future developments and survival of the communities. For instance, Brook characterises the dumping of nuclear and solid waste in Indigenous reservations in the US as 'environmental genocide', noting the serious effects on the health of present and future generations (cancer and birth defects, among others) and the absorption of

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Balancing States' Sovereignty with Indigenous Peoples' Rights", in Allen and Xanthaki (n 7), p 361 and M. Barelli, "Free, prior and informed consent in the aftermath of the UN Declaration on the Rights of Indigenous Peoples: developments and challenges ahead, The International Journal of Human Rights, 16:1 (2012), p 9.

[109] 2009 Report, para 46; EMRIP Report 2018, para. 15; Barelli (n 51), p 253; Quane (n 64), p 278; Gilbert and Doyle (n 69), p 313, noting that FPIC is required in certain circumstances but not Article 19.

[110] 2009 Report, paras 46 and 48.

[111] Ibid.

[112] See Chapter IV, section 6.3.

[113] UNDRIP, Article 10.

[114] Charters (n 55), p 409, noting that Article 10 "suggest a deliberate intention to retain a strong, blanket prohibition."

[115] ILA Report 2010, p 21.

toxins by the soil, plants and animals fundamental for their livelihood;[116] likewise, the impacts of tar sands developments in Canada have been also described in similar terms ('slow industrial genocide'), as Indigenous peoples' abilities to maintain their traditional way of life has been severely affected by the lack of availability of game and fish, and the high level of pollution of the air, soil and water have resulted in disproportionate levels of various form of lethal diseases which will affect generations to come.[117] Thus, both Articles, using a very clear language, address situations of potentially catastrophic effects for Indigenous peoples' way of life and environment, relying on FPIC as an enhanced safeguard in the face of these more substantive threats, constituting an improvement compared to C169.

2.2.3.1 The exploitation of natural resources on Indigenous lands

An important issue that involves the core of Indigenous peoples' traditional livelihood and cultural identity is the exploitation of natural resources on their lands. While UNDRIP does not define 'culture', its provisions reveal a broad understanding of it,[118] i.e., as a 'way of life' intertwined with their lands and resources.[119] This is reflected several Articles, such as: the recognition of the rights to practise and revitalise their cultural traditions and customs, including the protection of historical sites, artefacts and ceremonies (Articles 11.1); to revitalise, use, develop and transmit to future generations their histories, oral traditions and languages (Article 13.1); to maintain, control and protect their cultural heritage, TK and cultural expressions, including knowledge of the properties of fauna and flora (Article 31.1); and to their traditional medicines and health practices, including the conservation of vital medicinal plants, animals and minerals (Article 24.1); among others. In addition, UNDRIP recognises Indigenous peoples' right to "maintain and strengthen their

[116] D. Brook, "Environmental Genocide: Native Americans and Toxic Waste", American Journal of Economics and Sociology, Vol. 57, No. 1 (1998), pp 105-113.
[117] J. Huseman and D. Short, "A slow industrial genocide': tar sands and the Indigenous peoples of northern Alberta", International Journal of Human Rights, 16:1 (2012), pp 216-237.
[118] A. Xanthaki, "Culture: Articles 11(1), 12, 13(1), 15 and 34" in Hohmann and Weller (n 15), p 283. One author even notes that "one can find the cultural rights angle in each article of the Declaration". Stamatopoulou (n 77), p 392.
[119] S. Wiessner "Indigenous self-determination, culture, and land: a reassessment in light of the 2007 UN Declaration on the Rights of Indigenous Peoples" in E. Pulitano (ed.), *Indigenous Rights in the Age of the UN Declaration* (Cambridge University Press 2014), p 48; Xanthaki (n 118), pp 283-286, noting that UNDRIP in this point is influenced by the UNTS.

distinctive spiritual relationship" with their traditionally owned or otherwise occupied and used lands, territories and natural resources (Article 25), as well as their right "to manifest, practise, develop and teach their spiritual and religious traditions, customs and ceremonies" and "maintain, protect and have access in privacy to their religious and cultural sites" (Article 12.1), although without specifying which mechanism(s) would ensure these protection and private access, nor the 'effective measures' that States shall adopt to protect their cultural rights in Articles 13.2 and 31.2.

In this context, and as discussed during UNDRIP's (contentious) [120] negotiations by Indigenous organizations, it is critically important for them to own and control their lands, territories and resources, so they can protect their profound relationship with their environment [121] (which may require not only access but exclusive possession and use, to fully realise their spiritual relationship), [122] maintaining their cultural integrity and ensuring their survival as peoples.[123] Yet, States insisted that these provisions could not go against national regulations about nature conservation, security and strategic resources, arguing that "ultimate control over the land must lie with the Government(…) and land rights could only be considered within the framework of national legislation". [124] In addition, as mentioned in previous chapters, cultural and spiritual rights are not absolute, admitting some restrictions, as also repeatedly argued by States.[125] The result was the adoption of Article 26.2, recognising Indigenous peoples' right to own, use, develop and control lands, territories and resources they possess (Article 26.2) (which shall be recognised and protected by States, as per Article 26.3); however, this must be understood in the light of Article 32.2, recognising States' interest in the exploitation of natural resources, even those located within Indigenous peoples' lands.

[120] Charters (n 55), pp 401-402.
[121] UN Commission on Human Rights (UNCHR), Report of the Working Group Established in Accordance with Commission on Human Rights Resolution 1995/32 of 3 March 1995, UN Doc E/CN.4/1996/84 (4 January 1996), para. 84.
[122] Charters (n 55), p 411. For instance, the Kichwa Sarayaku people allow only the shamans to enter certain sacred places and interact with the spirits. See IACtHR, "Case of the Kichwa Indigenous People of Sarayaku v. Ecuador (Merits and Reparations)" Judgment of June 27, 2012 ('Sarayaku'), para. 57.
[123] Wiessner (n 119), p 47; Errico (n 108), p 333.
[124] UNCHR (n 121), paras 83 and 85.
[125] See Chapter IV section 3.3.1; Xanthaki (n 118), p 287; Charters (n 55), p 415.

Article 32.2 requires States to consult Indigenous peoples "in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources". Gilbert and Doyle argue that this means obtaining consent, based on the drafting history (some countries attempted to unsuccessfully change the word 'obtain' for 'seek', implying that consent is required);[126] the right to self-determination;[127] and the context provided by Article 32.1, referring to Indigenous peoples' right to "determine and develop priorities and strategies for the development or use of their lands or territories and other resources" for which consent would be necessary.[128] However, the majority position is that FPIC is an objective, due to its wording ('in order to obtain', same as Article 19), which does establish consent as a precondition, in contrast with Articles 10 and 29.2; that an earlier version of Article 32.2 required "States *obtain* their free and informed consent…"[emphasis added], which was ultimately changed, thus supporting the notion that FPIC is not required;[129] and that, as noted by Errico, UNDRIP has a similar approach as C169, recognising States' ownership of subsoil resources, limiting Indigenous peoples' rights, with Article 32.3 assuming the undertaken of extractive activities by States under certain conditions (redress and mitigation measures) and therefore what UNDRIP actually requires here are 'authentic negotiations' and not consent.[130] However, it is clear that these negotiations must be informed by the profound relationship that Indigenous peoples have with their lands, territories and resources, as also noted in Article 32.3, requiring States "to mitigate adverse environmental, economic, social, *cultural or spiritual* impact"[emphasis added].

[126] Gilbert and Doyle (n 69), p 317.
[127] Ibid., and C. Verbeek, "Free, prior and Informed Consent: the Key to Self-determination, and Analysis of the Kichwa People of Sarayaku v. Ecuador" 37Am.IndianL.Rev.263 2012-2013, pp 277-278.
[128] Gilbert and Doyle (n 69), p 313; see also S. Rombouts, "The Evolution of Indigenous Peoples' Consultation Rights under the ILO and UN Regimes", 53STAN.J.INT'L169-224(2017), p 202.
[129] Barelli (n 51), pp 252-253.
[130] Errico (n 108), pp 337-341 and 347. See also 2009 Report, para. 46.

2.2.3.2 Extractive projects and potential threats of substantive harm

One important issue is the possibility that development/extractive projects have potentially devastating effects on Indigenous peoples' traditional way of life and/or territories (as they often do),[131] threatening their physical and/or cultural survival. This includes material and spiritual effects (e.g., the destruction of a sacred site, the impossibility to conduct vital rituals), more difficult to identify and avoid without Indigenous participation and knowledge.[132] If Articles 10 and 29.2 are of any guidance, these types of impacts would require FPIC, but there is no distinction in the text of Article 32.2.

Yet, as noted by Newman, UNDRIP can be interpreted using a purposive approach, which may lead to a different understanding relative to its text,[133] resulting in broader or more limited roles for FPIC depending "on how one reads the purposes in which FPIC is to be situated".[134] In this context, Barelli argues that, as UNDRIP recognises and protects the special relationship between Indigenous peoples and their lands and resources, as well as their right to self-determination and the related right to freely pursue their economic, social and cultural development, "allowing States to implement projects which may have serious consequences on the lands, lives and, ultimately, existence of indigenous peoples, without their consent, appears incompatible with the spirit and normative framework of the Declaration".[135] Following this, measures that would not substantially interfere with the enjoyment of their fundamental human rights require only consultations, but for measures "likely to produce a major (negative) impact on their lands, cultures and, ultimately, lives of Indigenous peoples, the presumption is that States will have a duty" to obtain their FPIC.[136] This approach has been supported by several academics;[137] the Special Rapporteur, mentioning that "[a] significant, direct impact on indigenous peoples' lives or territories establishes a strong presumption that the proposed measure should

[131] 2013 Report, paras. 1-3; see also section 3 below.
[132] Barelli (n 51), p 269
[133] Newman (n 102), p. 243.
[134] Ibid.
[135] Barelli (n 20), p 38.
[136] Barelli (n 51), p 269.
[137] See for instance, Anaya and Puig (n 108), p 26; Newman (n 102), p 242; Errico (n 108), p 441; Rombouts (n 128), p 202; and Xanthaki (n 118), p 287; ILA (n 22), para. 5, among others.

not go forward without indigenous peoples' consent. In certain contexts, that presumption may harden into a prohibition of the measure or project in the absence of indigenous consent";[138] and the EMRIP, noting that "if a measure or project is likely to have a significant, direct impact on indigenous peoples' lives or land, territories or resources then consent is required".[139]

Contrasting this (and the majority of favourable views about UNDRIP presented in previous sections), there are scholars with a different perspective; for instance, Engle argues that albeit UNDRIP may appear to be progressive and 'pushing the envelope' in regards to self-determination and cultural rights, it also represents the persistence of "an international human rights paradigm that eschews strong forms of indigenous self-determination and privileges individual civil and political rights";[140] Churchill says that UNDRIP fails to fully recognise Indigenous peoples' right to self-determination, excluding its 'cardinal principle', i.e., that 'all peoples' can opt for independence from alien powers, turning "the rhetoric of self-determination to the opposite purpose (…) consecrating in law the very structure of internal colonial domination and exploitation at the hands of state entities from which Indigenous nations have been struggling to free themselves."[141] Watson and Venne, in a similar vein, argue that this failure to fully recognise Indigenous peoples' self-determination leaves them "captives of the colonial state",[142] where even the right to internal self-determination is determined by these colonial States "which occupy indigenous peoples' lands", remaining "the final determiner of all things within the life of the state, including the lives of Indigenous peoples";[143] and Merino mentions that UNDRIP's recognition of self-determination reinforced States' power on Indigenous territories, in exchange for some autonomy, but retaining the power to decide in cases where an agreement in not reached, except for some cases like

[138] 2009 Report, para. 47. See also 2013 Report, para. 31.
[139] EMRIP 2018 Report, para 35. See also para. 26(a), noting that "withholding consent is expected to convince the other party not to take the risk of proceeding with the proposal".
[140] K. Engle, 'On Fragile Architecture: The UN Declaration on the Rights of Indigenous Peoples in the Context of Human Rights' 22 EJIL (2011), pp 141-142.
[141] W. Churchill, "A Travesty of a Mockery of a Sham", Griffith Law Review, Vol 20 No 3 (2011), p 527.
[142] I. Watson and S. Venne, 'Taking up Indigenous Peoples' Original Intent and a Space Dominated by State Interventions' in Pulitano (n 119), pp 97-98. See also S. Newcomb, "Domination in relation to Indigenous ('dominated') Peoples in international law", in I. Watson (ed), *Indigenous Peoples as Subjects of International Law* (Routledge, 2018), pp 28-31.
[143] Watson and Venne (n 142), pp 90 and 99.

relocation.[144] This perspective leaves little space for an expansive interpretation of FPIC, even in the face of potentially substantive effects.

This is all the more important in regard to impacts on spiritual and cultural aspects, because they do not follow a lineal logic (e.g., the destruction of one tree could be devastating if it is the most sacred one) and there is often uncertainty about their materialisation, being difficult to foresee and fully understand (e.g., the consequences of the spirits abandoning certain sites). In this context, Watson and Venne argue that UNDRIP "provides no protection for indigenous places",[145] also highlighting a previous draft of Article 12 which required States to "take effective measures, in conjunction with the indigenous peoples concerned, *to ensure that indigenous sacred places(...) be preserved, respected and protected*"[emphasis added],[146] implying that stricter measures were required to protect these vital places. Similarly, Jensen and Perez note that, because States consider spiritual issues as a private matter, the recognition of these rights in UNDRIP is inconsequential, as attested by the many cases where the 'religion of the colonised' has not been considered respectable or valid, and thus the spiritual value of Indigenous peoples' lands and resources is not a serious consideration in States' social and judicial spheres.[147]

In addition, States have actually relied on a 'less expansive' interpretation of FPIC; Newman for instance mentions that Canada, in implementing the Declaration, recognised Indigenous peoples' rights to be consulted "with the aim of securing their free, prior and informed consent", [148] a wording more in line with a textual interpretation of FPIC that "sits less easily" with a purposive approach.[149] Similarly,

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[144] R. Merino, "Law and politics of Indigenous self-determination: the meaning of the right to prior consultation" in Watson (n 142), pp 130-131.
[145] Watson and Venne (n 142), p 101.
[146] See *supra* 107, Article 13.
[147] M. Jansen and G. Perez, "The Indigenous Condition: An Introductory Note" in M. Castillo and A. Strecker, *Heritage and Rights of Indigenous Peoples* (Leiden University Press 2017), pp 33-34.
[148] Department of Justice, *Principles Respecting the Government of Canada's Relationship with Indigenous Peoples*, Government of Canada (Ottawa: Minister of Justice and Attorney General of Canada, 2018), p 12.
[149] Newman (n 102), pp 243-244. See also C. Rodriguez-Garabito, "Ethnicity.gov: Global Governance, Indigenous Peoples, and the Right to Prior Consultation in Social Minefields" Indiana Journal of Global Legal Studies Vol 18 N 1(2010), noting that the emphasis on procedural aspects in conflicts involving Indigenous peoples reflects the prevalence of a neoliberal governance paradigm that leaves intact power asymmetries, resulting in multiple interpretations of consultations' requirements, including weak interpretations by some States which do not consider FPIC.

Williams criticises the narrow view adopted by the Canadian Supreme Court regarding Indigenous peoples' spiritual practices, diverging from an international trend that recognises and fortifies Indigenous peoples' rights reflected in UNDRIP,[150] by deciding that there was no violation of the Ktunaxa peoples' rights when the State approved, after a lengthy period of consultations but without their consent, a proposed year-round ski resort in a sacred place, which they opposed because of concerns that any permanent development would desecrate the place and drive the Grizzly Bear Spirit away, thus rendering many of their spiritual beliefs and traditions futile.[151] Finally, even regional courts have recently sidestepped any mentions of FPIC in the face of substantive harm to spiritual/cultural values, despite their reliance on UNDRIP in the legal reasoning, as I will analyse in the next section.

In sum, there is a majority position that defends an expansive (purposive) interpretation of UNDRIP, which would provide a strong protection of Indigenous peoples' rights by expanding the cases where consent is needed, especially in those situations of projects and developments in their lands that could have substantive impacts on their traditional way of life. However, State practice, relying on a less expansive approach, and the consideration of UNDRIP as an instrument that fails to fully recognise Indigenous peoples' right to self-determination, replicating 'colonialist' dynamics, provide an interesting counterargument, generating some uncertainty about the standard applicable. This is an issue where the precautionary principle could play an important role, supporting the argument in favour of an expansive interpretation, and providing guidance when there are reasonable concerns that potentially substantive harm to Indigenous peoples' livelihood (including spiritual/cultural aspects) could occur, requiring States to ensure that this harm would not materialise (independent from the right to self-determination), relying as well on heightened safeguards applicable to Indigenous peoples, such as obtaining FPIC, as I will explain in more detail in the next chapter.

[150] K. Williams, "How the Charter can protect Indigenous spirituality; or, the Supreme Court's missed opportunity in Ktunaxa Nation", 77(1) U. Toronto Fac. L. Rev. 1(2019).
[151] Ktunaxa Nation Council v British Columbia (Minister of Forests, Lands and Natural Resource Operations), 2017 SCC 54(2 November 2017).

2.3 Assessment

The broadly supported Declaration constitutes another positive step for Indigenous peoples in international law, consolidating the progress achieved in the last couple of decades by recognising several rights like (internal) self-determination, cultural/spiritual rights, and right to lands and resources. It also includes important participatory mechanisms to protect these rights, specifically prior consultations, which allows them to influence the outcome of a decision that could affect them. Interestingly, unlike C169, UNDRIP does not explicitly mentions the duty to conduct impact studies; yet, these studies are implicitly integrated as a way to identify potential risks and effects on their way of life (social, cultural and spiritual aspects) and environment, constituting a vital part of 'informed' consent. These impact studies provide another instance, together with consultations, to incorporate TK in decision-making processes and acquire the best information available, anticipating possible harm and propose alternatives, especially when it comes to spiritual and cultural aspects, where there is often a degree of uncertainty about how they are going to be affected.

As in the case of C169, consent is not generally a requirement; however, and going beyond this convention, UNDRIP clearly establishes two situations where it shall be obtained (both of which represent a substantive threat to the Indigenous survival), relocation and the storage of hazardous materials in Indigenous lands, acting as an enhanced safeguard. Regarding potentially substantive effects derived from the exploitation of natural resources in Indigenous lands, this is more controversial; depending on the 'purposes in which FPIC is to be situated', there are two interpretations: a majority one that highlights UNDRIP's recognition of Indigenous peoples' right to self-determination and role in protecting Indigenous peoples' rights and relationship with their territories, which defends the need to obtain FPIC in the face of substantial threats; and another that considers UNDRIP as an instrument that replicates colonial paradigms, arguing that States retain the final decision-making power in this context, a position also seemingly favoured by States (and arguably, supported by recent regional jurisprudence, where an expansive

interpretation of FPIC as not been followed, as I will analyse below). In this sense, although in general establishing stronger safeguards to protect Indigenous peoples' rights, there is some degree of uncertainty about FPIC, especially when it comes to the protection of cultural and spiritual sites and values from substantive threats of harm.

I move on now to the protection of Indigenous peoples' rights in the Inter-American and African systems.

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3. Regional protection of Indigenous peoples

The protection and recognition of Indigenous peoples' rights has been the focus of regional institutions since a long time, resulting in important developments regarding participatory, cultural and land rights, especially in the Inter-American and African systems.[152] In this context, both the 1969 American Convention on Human Rights, and the 1981 African Charter on Human and Peoples' Rights have been interpreted in order to accommodate Indigenous peoples' claims and protect their rights by their monitoring bodies, although with some regional differences. These developments, especially those regarding participation and FPIC, are the focus of this section, starting with the Inter-American system, due to its influence on the African system, which will conclude this section.

3.1 The American Convention on Human Rights

The American Convention is one of the main instruments of the Inter-American Human Rights System,[153] which also includes the 1948 Charter of the Organization of American States ('OAS');[154] and the 1948 American Declaration of the Rights and

[152] Barelli (n 51), pp 257 and 261. Xanthaki (n 118), p 277. See also S. Young, *Indigenous Peoples, Consent and Rights: Troubling subjects* (Routledge, 2020), pp 157-158; S. Rombouts, *Having a say: Indigenous peoples, international law and free, prior and informed consent* (WLP, 2014), p 219.
[153] I. Madariaga, "ILO Convention 169 in the Inter-American Human Rights System: Consultation and Consent", International Journal of Human Rights, 24:2-3, (2020), p 257.
[154] OAS, Charter of the Organization of American States, 30 April 1948, 119UNTS3, entry into force 13 December 1951.

Duties of Man,[155] among others.[156] This Convention[157] recognises a series of rights and freedoms that States must respect and ensure[158] (mostly of a civil and political character),[159] such as the rights to life (Article 4), to personal liberty (Article 7), and property (Article 21), as well as freedom of conscience and religion (Article 12), of thought and expression (Article 13) and of association (Article 16), among others. Also, Article 26 requires States to adopt measures for the 'progressive achievement of economic, social, and cultural standards' defined in the American Declaration,[160] which considers cultural rights as manifestations of arts and sciences,[161] although the monitoring bodies have adopted a broader approach on Indigenous peoples' cultural rights (see below).

The American Convention establishes that two organs, the Inter-American Commission on Human Rights ('IACHR')[162] and the IACtHR,[163] are competent to address "matters relating to the fulfilment of the commitments" made by States[164] (being also able to interpret this Convention);[165] yet, they do not function as a 'first instance-appeals court' system,[166] having full autonomy and independence.[167]

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[155] OAS, American Declaration of the Rights and Duties of Man, OAS Res.XXX(1948), OAS Doc. OAS/Ser.L/V/I.4rev.13 (2010).

[156] See 'Basic Documents in the Inter-American System' http://www.oas.org/en/iachr/mandate/Basics/intro.asp [accessed November 2020].

[157] Complemented by the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights ("Protocol of San Salvador"), 16 November 1999, and the Protocol to the American Convention on Human Rights to Abolish the Death Penalty, 8 June 1990.

[158] American Convention, Articles 1-2.

[159] T. Antkowiak and A. Gonza, *The American Convention on Human Rights* (OUP, 2017), p 6.

[160] Article 26 mentions "the implicit rights set forth" in the OAS Charter, which does not define these standards; however, the American Declaration "contains and defines the fundamental human rights referred to in the Charter." IACtHR, "Interpretation of the American Declaration of the Rights and Duties of Man Within the Framework of Article 64 of the American Convention on Human Rights," Advisory Opinion OC-10/89, 14 July 1989, para. 43.

[161] See Article XIII: "Every person has the right to take part in the cultural life of the community, to enjoy the arts, and to participate in the benefits that result from intellectual progress, especially scientific discoveries."; see also San Salvador Protocol, Article 14.

[162] Established by the 5th Meeting of Consultation, Santiago, Chile, August 12-18, 1959. Final Act, OAS Official Records, OEA/Ser.C/II.5, p 10-11. The American Convention details its organization, function, competence and procedure (Chapter VII), and every OAS member is subject to it by signing the American Declaration.

[163] Established by the American Convention (Chapter VIII), which also regulates its organization, jurisdiction and function, and procedure.

[164] American Convention, Article 33.

[165] Antkowiak and Gonza (n 159), p 1.

[166] Ibid., p 13

[167] IACtHR, "Control of Due Process in the exercise of the Powers of the Inter-American Commission on Human Rights (Articles 41 and 44 to 51 of the American Convention on Human Rights", Advisory Opinion OC-19/05, 28 November 2005, para. 25.

a) the Inter-American Commission on Human Rights

The IACHR's main function is to "promote the observance and protection of human rights" and serve as a consultative organ to the OAS.[168] To do this, it can *inter alia* make recommendations to States; prepare studies and reports; submit an annual report to the OAS General Assembly; and take action on petitions and other communications regarding violations or complaints of violations of the American Convention by States (or the American Declaration, if a State has not ratified the Convention), [169] brought by any person, group, or non-governmental entity recognised in at least one member State.[170] In this procedure, the IACHR examines the admissibility of the petition and, if admissible, carries out an investigation,[171] with the possibility of reaching a friendly settlement of the matter.[172] If not, the Commission makes a preliminary report, transmitted to the State(s) concerned, which includes written and oral statements of the parties; the facts and recommendations; and a deadline to comply with them.[173] Although these recommendations are not legally binding, they have a very important role in influencing State's conduct;[174] moreover, if the Commission considers that there is insufficient compliance with the recommendations, and if the State has accepted its jurisdiction, it refers the case to the IACtHR,[175] which will issue a binding judgment. The Commission can decide to publish the report if the State has not adopted adequate measures.[176]

During this procedure, the IACHR can issue precautionary measures, on its own initiative or at the request of a party, regarding situations that are serious (i.e., a "grave impact that an action or omission can have on a right or the eventual effects

[168] OAS Charter, Article 106.
[169] American Convention, Article 41; Antkowiak and Gonza (n 159), p 9; see for instance IACHR, "Report No. 75/02, Case 11.140, Mary and Carrie Dann v. United States", December 27, 2002.
[170] American Convention, Article 44.
[171] Ibid., Article 48. This can also be initiated *motu proprio.* See "Rules of Procedure of the Inter-American Commission on Human Rights" (IACHR Rules of procedure'), Article 24.
[172] American Convention, Article 48.1(f), which requires a report containing the facts and the solution reached, Article 49.
[173] Ibid., Article 50; IACHR Rules of procedure, Article 44.2. When it does not find violations, the report is final and published, Article 44.1.
[174] Antkowiak and Gonza (n 159), p 9; Rombouts (n 152), p 235; Verbeek (n 127), p 265. The commission can adopt follow-up measures to verify compliance with recommendations. IACHR Rules of procedure, Article 48.
[175] IACHR Rules of procedure, Article 45.1. This is an additional step necessary upon ratifying the American Convention. Antkowiak and Gonza (n 159), p 10.
[176] American Convention, Article 51.

of a petition or case") and urgent (i.e., a "risk or threat that is imminent and can materialise") which could cause irreparable harm to persons or the subject matter of a pending petition or case,[177] requiring only a *prima facie* standard of proof.[178] However, some of the requirements could reduce their effectiveness; for instance, the Commission must take into account if the situation was brought to the attention of authorities or the reasons why this has not been possible, as well as information presented by States,[179] slowing the process and allowing States to retaliate against the petitioners.[180] This, added to the 'imminence' requirement, indicate that these measures are more oriented to avoid foreseeable (and not uncertain) harm, such as credible threats to life and personal integrity,[181] even in Indigenous issues. For instance, the IACHR required Brazil to adopt measures to protect an Indigenous community and its leaders from threats to life and personal integrity from third parties and State agents, who have engaged in acts of violence and invaded their lands; however, regarding the potential risk of a dam breaking close to their lands, these measures were denied because it could not determine that the risk was imminent, despite the existence of damage.[182] Similarly, it required Peru to provide medical assistance and access to clean water and food to Indigenous communities in the Amazon at risk of dying and suffering serious health issues, due to frequent oil spills in the area; yet, and although the Commission mentioned that it is 'reasonable to expect' environmental effects from these oil spills, jeopardising the communities' health, it did not require measures to avoid or mitigate their occurrence, needing more information to assess the gravity and urgency.[183]

That being said, these precautionary measures may have broader effects, so it is not unreasonable to consider that they could anticipate potential harm. For instance, the Commission requested Mexico to adopt all the necessary measures to

[177] IACHR Rules of procedure, Article 25.1. and 25.2.
[178] Center for Justice and International Law ('CEJIL'),"La protección de los Derechos Humanos en el Sistema Interamericano: Guia para defensores y defensoras de Derechos Humanos" (2nd Edition, CEJIL, 2012), p 122 [in Spanish]. See also IACHR, "Resolución 44/2020, Medida Cautelar No. 1211-19, Comunidad Remanente del Quilombo Rio dos Macacos respecto de Brasil", August 6, 2020 ('Quilombo Rio dos Macacos'), para. 3 [in Spanish].
[179] IACHR Rules of procedure, Article 25.6.(a) and 25.7.(b).
[180] CEJIL (n 178), p 123, noting that sometimes States' agents harass petitioners at these stages.
[181] Ibid., p 122.
[182] Quilombo Rio dos Macacos, paras. 39-50 and 58.
[183] IACHR, "Resolución 52/2017, Medidas Cautelares No. 120-16, Pobladores de la Comunidad de Cuninico y otra respecto de Perú", December 2, 2017, paras. 25-39 and 41 [in Spanish].

protect the life and integrity of the Choreachi Indigenous community members, directly threatened by violent episodes and harassment conducted by people from different communities (who disputed the ownership of their lands), and drug dealers (who wanted to use their lands for illegal activities).[184] This tense situation also resulted in the impossibility for the Choreachi to conduct their social and cultural activities, including ceremonies, affecting their livelihood.[185] While the measures granted were focused on the imminent threats to the life and physical integrity of the community, the implementation of effective (preventive) measures would enable the continuation of their traditional activities, avoiding subsequent cultural impacts.

b) The Inter-American Court on Human Rights

The IACtHR has an advisory jurisdiction, issuing authoritative opinions about the Convention or other treaties concerning the protection of human rights, at the request of States and organs, including the Commission;[186] and an adjudicatory jurisdiction, addressing claims of States' alleged violations of the Convention, brought by the Commission or another State.[187] In these proceedings, the Court must interpret the applicable norms, assess the evidence submitted and determine if a State has violated the Convention, in which case it "shall rule that the injured party be ensured the enjoyment of his right or freedom that was violated" and, if appropriate, that the consequences be remedied and fair compensation paid.[188]

The Court can adopt provisional measures, based on a *prima facie* standard of proof,[189] in situations of extreme gravity (i.e., at its most intense degree) and urgency (i.e., imminent, requiring immediate remedies) to avoid "irreparable damage to persons".[190] They can be requested at any stage of the proceedings by the

[184] IACHR, "Resolución 51/2016, Medida Cautelar No. 60-14, Ampliación de beneficiarios a favor de integrantes de la Comunidad Indígena de Choréachi respecto de México" October 28, 2016, paras. 1-3. [in Spanish]
[185] Ibid., para 14.
[186] American Convention, Article 64.
[187] Ibid., Article 61, after going through the complaint process before the Commission.
[188] Ibid., Article 63: Antkowiak and Gonza (n 159), p 12.
[189] See for example, IACtHR, "Four Ngöbe Indigenous Communities and their members (Request for Provisional Measures by the Inter-American Commission on Human Rights regarding the Republic of Panama)," May 28, 2010, para. 11.
[190] Ibid., paras. 8-9. American Convention, Article 63.2.

Commission,[191] or the (alleged) victims,[192] and, like any other decisions adopted during the proceedings, they are legally binding.[193] Like the IACHR, they are mostly granted to avoid foreseeable harm, like direct threats to life and personal integrity, which in the case of Indigenous peoples derives from violence and land conflicts; for instance, the IACtHR required Ecuador to provide protection and remove explosive material located in the territories of the Kichwa Sarayaku peoples, in order to protect their life and integrity, threatened by third parties interested in the exploitation of natural resources in their lands.[194] Interestingly, the Court mentioned the existence of not only actual but also 'potential' risks from the explosives, and the need to avoid possible environmental, social and cultural effects during their removal,[195] indicating an awareness of the importance of a broader approach regarding Indigenous peoples' rights, later reflected in the Sarayaku judgment (see below).

In general, and following Article 29 of the American Convention (precluding a restrictive interpretation of the rights enshrined therein),[196] both supervisory bodies rely on the interpretation most favourable to the protection of the rights involved (*pro homine* principle);[197] in doing so, they follow a progressive approach regarding human right treaties, considering them "live instruments whose interpretation must adapt to the evolution of times and, specifically, to current living conditions",[198] thus taking into account normative developments in international human rights law. In the case of Indigenous peoples, this includes C169, UNDRIP and Reports of the Special Rapporteur, among others;[199] yet, the more recent 2016 American Declaration on the

[191] American Convention, Article 63.2.
[192] IACtHR "Rules of Procedure of the Inter-American Court on Human Rights", Article 27.3.
[193] Antkowiak and Gonza (n 159), p 12.
[194] IACtHR, "Matter of the Kichwa Indigenous People of Sarayaku (Provisional Measures regarding the Republic of Ecuador)", February 4, 2010, para. 3.
[195] Ibid., para. 13.
[196] Antkowiak and Gonza (n 159), p 15. See also IACHR, "Indigenous and Tribal Peoples' Rights over their Ancestral Lands and Natural Resources" OEA/Ser.L/V/II. Doc 56/09 (30 December 2009) ('Ancestral lands'), para. 10.
[197] Rombouts (n 152), p 227. IACtHR, "Case of the Mayagna (Sumo) Awas Tingni Community v. Nicaragua. Merits, Reparations and Costs." Judgment of January 31, 2001 ('Awas Tingni'), paras. 147-148. See also Ancestral lands, para. 10.
[198] Awas Tingni, para. 146
[199] See for example, IACHR, "Report No. 40/04, Case 12.053, Maya Indigenous Communities of the Toledo District (Belize)" October 12, 2004 ('Maya Indigenous Community'), para 118; IACtHR, "Case of the Saramaka People v. Suriname (Preliminary Objections, Merits, Reparations and Costs)" Judgment of November 28, 2007 ('Saramaka'). See also Madariaga (n 153).

Rights of Indigenous Peoples ('ADRIP')[200] has not played a prominent role in the Court's interpretation of the American Convention,[201] been used in only one case so far, involving the granting of oil concessions in an Indigenous territory, without conducting impact studies or consultations.[202] In this case, the Court relied on its Article XXIII.1 (right to participate in decision-making, through their own representatives, in matters that affect their rights, related to the development and execution of laws, public policies, and programs, among others), in connection with Argentina's duty to adopt legislative and other measures to protect their right to property;[203] however, in the interpretation of this judgment, when clarifying if these measures specifically included consultations, there was no reference to the ADRIP.[204]

3.1.1 Indigenous peoples' rights in the American Convention

The American Convention does not explicitly mention 'Indigenous peoples'; however, the supervisory organs have paid particular attention to their rights,[205] developing important standards of protection and extensive jurisprudence,[206] especially regarding the protection of Indigenous peoples' rights to their ancestral territories.[207]

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[200] OAS General Assembly, AG/RES.2888(XLVI-O/16). June 4, 2016. Adopted by consensus.
[201] See for instance, G. Braga, "The judgment of the case Xucuru People v. Brazil: InterAmerican Court of Human Rights between consolidation and setbacks" Brazilian Journal of International Law, Vol 16 n 2 (2019), p 215, criticising the lack of mentions in this 2018 case.
[202] IACtHR, "Caso Indígenas Miembros de la Asociación Lhaka Honhat (Nuestra Tierra) v. Argentina (Fondo, Reparaciones y Costas)", Judgment of February 6, 2020 ('Lhaka Honhat'), para 1. [in Spanish].
[203] Ibid, paras. 354-355.
[204] IACtHR, "Caso Indígenas Miembros de la Asociación Lhaka Honhat (Nuestra Tierra) v. Argentina (Interpretación de la Sentencia de Fondo, Reparaciones y Costas)", Judgment of November 24, 2020. This could be because the Court's jurisprudence on this point is well developed; also, as noted by Errico, ADRIP reiterates Articles 19 and 32.2 of UNDRIP, which are often used in legal analysis. S. Errico, "The American Declaration on the Rights of Indigenous Peoples", ASIL vol 21 issue 7 (2017).
[205] Already in 1972 the IACHR expressed the need to protect Indigenous 'populations' based on historical reasons and moral and humanitarian principles. "Resolution on Special Protection for Indigenous Populations. Action to Combat Racism and Racial Discrimination", OEA/Ser.P.AG/doc.305/73, rev.1, (1973).
[206] Madariaga (n 153), p 258; Young (n 152), pp 157-158.
[207] See IACHR, "Indigenous and Tribal Peoples of the Pan-Amazon Region" OEA/Ser.L/V/II. Doc. 176 (29 September 2019)('Pan-Amazon report'), para. 16. 'Territories' refer to the totality of lands and natural resources traditionally used by them. Saramaka, footnote 66; Ancestral lands, footnote 83.

As noted by the IACHR, Indigenous peoples have a unique and shared worldview based on their close relationship with these territories, critical for their physical, cultural and spiritual vitality,[208] and manifested in different ways such as the traditional presence on their lands; maintaining sacred or ceremonial sites; and customary use of natural resources, among others.[209] Similarly, the IACtHR noted that Indigenous peoples "by the fact of their very existence, have the right to live freely in their own territory", recognising their collective property over their lands, and the existence of a material and spiritual element that constitutes the fundamental basis of their cultures, spiritual life, integrity and economic survival.[210] In this sense, these territories and resources are not only a means of subsistence, but "a part of their worldview, their religiosity, and therefore, of their cultural identity", and are closely connected to their oral expressions and traditions, customs, arts and rituals, TK, practices, and values.[211]

The special relationship between Indigenous peoples and their territories is a fundamental part of their culture (understood as a way of life),[212] and spiritual life[213] without which "their very physical and cultural survival" is at stake.[214] To protect this, and in accordance with its progressive approach, the IACtHR interprets Article 21 of the American Convention, right to property, in a broad way, defining 'property' as both materials things and rights that can be part of a person's patrimony, including "corporeal and incorporeal elements and any other intangible object capable of having value",[215] integrating this relationship into the guarantee established by this Article.[216] This means that States must adopt 'special measures' to

[208] Maya Indigenous Communities, para. 155.
[209] Ancestral lands, para. 1.
[210] Awas Tingni, para. 149; IACtHR, "Caso Pueblo Indígena Xucuru y sus Miembros v. Brazil (Excepciones Preliminares, Fondo, Reparaciones y Costas)", Judgment of February 5, 2018 ('Xucuru'), para. 115 [in Spanish].
[211] IACtHR, "Case of the Yakye Axa Indigenous Community v. Paraguay (Merits, Reparations and Costs)" Judgment of June 17, 2005 ('Yakye Axa'), paras. 135 and 154; and "Case of the Sawhoyamaxa Indigenous Community v. Paraguay (Merits, Reparations and Costs)", Judgment of March 29, 2006 ('Sawhoyamaxa'), para. 117.
[212] Xanthaki (n 118), p 277; Lhaka honhat, para. 231 and ft 233; ADRIP, section III: Cultural Identity.
[213] Awas tingni, para. 149; Yakye Axa, para. 137; Sawhoyamaxa, para. 118.
[214] Saramaka, paras. 121 and 141; Sarayaku, para. 146.
[215] Awas tingni, para. 144.
[216] Yakye Axa, para. 137; Sawhoyamaxa, para. 118; Saramaka, para. 91; Sarayaku, para. 145, among others. Pentassuglia notes that Indigenous property "lies at the intersection of a critical understanding of possession and title, on the one hand, and material and spiritual basis of identity, on the other." G.

ensure Indigenous peoples' "full and equal exercise of their right to the territories they have traditionally used and occupied"[217] so they can continue with their traditional livelihood[218] and "freely determine and enjoy their own social, cultural and economic development, which includes the right to enjoy their particular spiritual relationship" with these territories and resources.[219] This links Article 21 to self-determination[220] (including the control over natural resources and lands)[221] and highlights the importance of protecting cultural and spiritual aspects and manifestations, such as sacred sites, ancestral burial places, and ceremonies and festivities,[222] "inextricably linked to the collective understanding of the concepts of property and possession" and their identity.[223]

Among these special measures we can find, *inter alia,* the legal recognition of their diverse and specific forms of control, ownership, use and enjoyment of their territories, [224] which includes the protection of their environment; [225] delimit, demarcate and title their lands, with the full participation of Indigenous peoples;[226] the restitution of lands and territories that they have unwillingly left or lost

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Pentassuglia, "Towards a Jurisprudential Articulation of Indigenous Land Rights" EJIL, Vol. 22 no. 1 (2011), p 171.

[217] Saramaka, para. 91; Maya Indigenous Communities, para. 131

[218] Saramaka para 121. See also Ancestral lands, paras. 2 and 57, noting that "the guarantee of the right to territorial property is a fundamental basis for the development of indigenous communities' culture, spiritual life, integrity, and economic survival", and a prerequisite to the enjoyment of other basic rights such as food, water, cultural integrity and survival, and their traditional livelihood.

[219] Saramaka, para. 95. See also IACtHR, "Case of the Kaliña and Lokono Peoples v. Suriname (Merits, Reparations and Costs)" Judgment of November 25, 2015 ('Kaliña Lokono), para. 124, and IACHR, "Indigenous Peoples, Communities of African Descent, Extractive Industries" OEA/Ser.L/V/II Doc. 47/15 (31 December 2015) ('Extractive Industries'), para. 166.

[220] Rombouts (n 152), p 260; see also Saramaka, para. 93, Sarayaku, para. 217, and ADRIP, Article III.

[221] Sarayaku, para. 146; Xucuru, para. 117; Lhaka honhat, para. 98.

[222] Yakye axa, paras. 131-137; Ancestral lands, paras. 150-151; Pan-Amazon report, para 42; Sarayaku, para. 148. See also Pasqualucci (n 76), p 58.

[223] D. Newman, E. Ruozzi and S. Kirchner, "Legal Protection of Sacred Natural Sites Within Human Rights Jurisprudence: Sápmi and Beyond" in L. Heinämäki and T. Martina Herrmann (eds) *Experiencing and Protecting Sacred Natural Sites of Sami and other Indigenous Peoples* (Springer, 2017), p 13.

[224] Maya Indigenous Communities, para. 115; Awas tingni, para. 149; Sawhoyamaxa, para. 120. Pentassuglia notes that this is designed to protect against third parties' incursions that threaten their traditional way of life. Pentassuglia (n 216), p 171.

[225] Kaliña Lokono, para. 172; Lhaka honhat, paras. 247-248; Pan-Amazon report, para 277; ADRIP, Article XIX.

[226] Awas Tingni, para. 164; and Sawhoyamaxa, para. 143; Xucuru, para. 117.

possession of;[227] and their effective participation in decision-making, which require further analysis.

3.1.2 Article 21 and Indigenous peoples' effective participation

Indigenous peoples' rights over their lands and natural resources are not absolute, as explained by the Court in a landmark judgment, *Saramaka v. Suriname.* In this case, Suriname granted gold mining and logging concessions in Saramaka territory without conducting impact assessments or consultations (and thus without full certainty about all the potential impacts), arguing that the concessions did not affect Saramaka traditional interests.[228] The Court noted that although extractive activities could affect the use and enjoyment of natural resources by the Saramaka, the right to property "should not be interpreted in a way that prevents the State from granting any type of concession for the exploration and extraction of natural resources within Saramaka territory".[229] Thus, States can restrict the use and enjoyment of the lands and resources, if these restrictions are established by law, necessary, proportional, with the aim of attaining a legitimate goal in a democratic society,[230] and do not deny their survival as peoples.[231] This must be determined on a case by case basis[232] (as Indigenous peoples have different traditional livelihoods and uses for natural resources), but to ensure that Indigenous peoples' survival is not at risk, the Court, following among others UNDRIP's Article 32, [233] established three specific safeguards: first, their effective participation, in conformity with their customs and traditions, regarding any development or investment plan [234] in their territories; second, that States must guarantee they will receive a reasonable benefit; and third,

[227] Ancestral lands, para. 123; Sawhoyamaxa, paras. 128-129.
[228] Saramaka, paras. 124, and 147-148.
[229] Ibid., para. 126. See also Yakye Axa, paras. 144-145.
[230] Saramaka, para. 127
[231] Ibid., para. 128; Sarayaku, para. 156. 'Survival' refers to their ability to continue with their traditional way of life and the preservation and protection of their special relationship with their lands, cultural identity social structure and customs, beliefs and traditions. IACtHR, "Case of the Saramaka People v. Suriname (Interpretation of the Judgment on Preliminary Objections, Merits, Reparations and Costs)" Judgment of August 12, 2008 ('Saramaka interpretation'), para. 37.
[232] Yakye Axa, para. 146; Ancestral lands, para 264.
[233] Saramaka, paras. 130-131; also mentioning jurisprudence of the HRC regarding Article 27 ICCPR.
[234] Defined as "any proposed activity that may affect the integrity of the lands and natural resources", especially logging or mining concessions. Saramaka, footnote 127.

States must ensure that no concession is granted without prior environmental and social impact assessments ('ESIA'), conducted by independent entities.[235] It also noted that, contrary to Suriname's assertions, the evidence showed the effects that logging concessions had over natural resources traditionally used by the Saramaka,[236] including substantive cultural and spiritual impacts[237] and long-reaching effects,[238] impacts difficult to determine and foresee without Indigenous peoples' participation and TK.

In the interpretation of this judgment, the Court mentioned that ESIAs are part of the duty to guarantee the 'effective participation' in the process of granting concessions, together with the duty to 'actively consult' Indigenous peoples.[239] This enables the inclusion of Indigenous peoples' TK in the identification of potential effects on their traditional livelihood (that go beyond strictly environmental aspects), ensuring the awareness of possible risks, "in order that the proposed development or investment plan is accepted knowingly and voluntarily",[240] as well as the evaluation of potential alternatives and mitigation measures.[241] These ESIAs must conform to the relevant international standards and best practices, i.e., the Akwe:Kon Voluntary Guidelines,[242] ensuring the full and effective participation of Indigenous peoples in not only ESIAs, but also cultural (including values and customs) and cultural heritage (including sacred sites) impact assessments, considering their interests, concerns, and TK, under the explicit guidance of the precautionary principle.[243]

[235] Ibid., para. 129. See also Kaliña Lokono, para. 226
[236] Saramaka, para. 148.
[237] Ibid., para 150, like massive damage to ecological and cultural functions and services, causing great offense to the spirits.
[238] Ibid., para. 152, mentioning the blockage of creeks due to poorly constructed bridges built by logging companies, rendering the water unusable for drinking, cooking, fishing and irrigation, resulting in less productive crops and the subsequent abandonment of farms, affecting their traditional way of life.
[239] Saramaka interpretation, para. 41.
[240] Saramaka, para. 133; Sarayaku, para. 208; Extractive industries, para. 214. These Guidelines were analysed in depth in Chapter III, section 6.
[241] Ancestral lands, paras. 263 and 267, highlighting the role of TK in identifying potential impacts on their way of life, and alternatives and mitigation measures.
[242] Saramaka interpretation para. 41 and footnote 23. See also Sarayaku, para 206.
[243] See Chapter III, section 6.

Regarding consultations, the Court established in *Saramaka* certain requirements, further developed in another case, *Sarayaku v. Ecuador*,[244] where the government granted oil exploration concessions in Indigenous lands, without their effective participation and disregarding social, spiritual and cultural impacts on the Sarayaku people.[245] Following this, consultations must be conducted from early on, before adopting administrative/legislative measures that could affect Indigenous peoples' rights, providing enough time for debate;[246] in good faith, establishing a dialogue without coercion, based on trust and mutual respect, which entails constant communication efforts and the dissemination and exchange of information;[247] through culturally appropriate procedures, taking into account their own circumstances and respecting their decision-making methods, in accordance with their own traditions;[248] and with the objective of reaching an agreement, allowing them to influence the decision-making process.[249] Moreover, the Court ruled in *Saramaka* that in the case of "large-scale development or investment projects that would have a major impact" on Indigenous peoples' territories, States' have a duty to obtain FPIC,[250] explicitly referring to the argument that "the level of consultation(…) required is obviously a function of the nature and content of the rights" of Indigenous peoples,[251] reflecting a sliding-scale approach, indicating a strong degree of protection[252] where, as noted by the IACHR, FPIC works as a 'heightened safeguard' in relation to Indigenous peoples' traditional way of life and environment[253] including in the face of potential threats of substantive harm.

[244] Also concluding that consultation is a general principle of international law. Sarayaku, para. 164; see also IACtHR, "Case of the Garífuna Community of Triunfo de la Cruz and its members v. Honduras (Merits, Reparations and Costs)", Judgment of October 8, 2015 ('Garifuna'), para. 222.
[245] Sarayaku paras 184, 192-193, 207 and 218, among others.
[246] Saramaka para 133, Sarayaku, paras 166 and 180-181.
[247] Saramaka, para 133; Sarayaku, paras. 185-186 and 208, also referring in footnote 244 to the UNPFII report in *supra* 104 and highlighting the characteristics of 'informed' consent, which includes respecting the precautionary principle.
[248] Saramaka, para 133; Sarayaku, paras, 201-202.
[249] Saramaka, para 133; Sarayaku para 167 and 185. See also Garifuna, paras. 215-218 and Kaliña Lokono, para 201. The IACHR notes that this duty also includes accommodating Indigenous peoples' concerns and interests, and "failing such accommodation, to provide objective and reasonable motives for not doing so." Ancestral Lands, paras. 323-327.
[250] Saramaka, para. 134.
[251] Ibid., para. 137.
[252] Pentassuglia (n 216), p 178; Barelli (n 51), p 258; Rombouts (n 152), pp 272-273.
[253] Ancestral lands, para. 333.

There is, however, a controversy about the meaning of 'large-scale developments that would have a major impact on indigenous lands'; for instance, Pasqualucci noted that in the interpretation of the *Saramaka* judgment, the Court identified 'major developments or investments plans' as those that "may have a profound impact on the property rights of the members of the Saramaka people to a large part of their territory",[254] thus limiting consent to only those situations, giving States "leeway to grant smaller concessions that could seriously impact" Indigenous peoples' way of life without their consent;[255] and Verbeek, in agreeing with this, also criticises that the "full protection of property rights should not depend on the amount of land involved".[256] It is important to note that the Court has not further elaborated on the issue of FPIC in recent cases; however, based on its progressive approach and the fact that States cannot threaten Indigenous peoples' survival, it seems that the requirement to obtain FPIC is not in fact limited to large-scale projects that could cause profound impacts on a large portion of their territory; furthermore, in the interpretation of the *Saramaka* judgment, the Court itself required States to ensure that 'cumulative impacts' do not cause serious effects that could jeopardise the survival of Indigenous peoples,[257] also noting that, depending on the level of impact of the proposed activity, obtaining consent may be required;[258] and the Commission expressed that 'large-scale projects' should be interpreted in a broad way, taking into account at least two criteria: the characteristics of the project, such as its magnitude or scale; and the human and social impact of the activity, considering the particular circumstances of the peoples concerned.[259]

In sum, the Court has established an important standard, by which consultations and ESIAS are required before the adoption of measures that could affect Indigenous peoples; however, and as noted by a majority of authors,[260] if these

[254] Pasqualucci (n 76), p 90, citing Saramaka interpretation footnote 14.
[255] Ibid., p 91. See also T. Ward, The Right to Free, Prior, and Informed Consent: Indigenous Peoples' Participation Rights within International Law 10 Nw.U.J.Int'lHum.Rts. 54 2011-2012, p 64.
[256] Verbeek (n 127), pp 269 and 278-279.
[257] Saramaka interpretation, para. 41; see also Extractive industries, paras. 190-191.
[258] Saramaka interpretation, para. 17. See also Rombouts (n 152), p 269 and Barelli (n 51), p 258, arguing that the Court has aligned itself with UNDRIP (interpreted expansively) regarding FPIC.
[259] Pan-Amazon report, para. 35. This would include cases of relocations and the storage of hazardous materials in Indigenous lands. Errico (n 204).
[260] See for instance, Barelli (n 51), pp 257-258; Rombouts (n 152), p 269; Pentassuglia (n 216), p 184; 2020 report, para. 60; among others.

measures could jeopardise their survival, States must obtain their FPIC. Yet, recent developments raise some questions about the application of this FPIC criterion.

3.1.3 FPIC and the protection of cultural and spiritual rights

Despite the above, it can be argued that some uncertainty remains regarding potential substantive impacts on Indigenous peoples' spiritual and cultural relationship with their lands. This is due to the fact that the Court has abstained from requiring FPIC after *Saramaka*, despite its importance, relying instead on consultations, which provides a lesser degree of protection, seemingly contradicting the progressive approach previously adopted. For instance, in *Sarayaku*, the concessions devastated 'the living forest' inhabited by spirits, who provide the Kichwa peoples the energy to survive;[261] and resulted in the destruction of the great tree of Lispungu, preventing one of the shamans to use its powers to cure ailments, causing his death, as well as the Wichu kachi mountain, making the Spirit owner to abandon the place along with the animals, rendering the place sterile.[262] The Kichwa also had to retreat into the jungle for six months, disrupting the spiritual transmission of knowledge,[263] and suspending important ancestral cultural rites and ceremonies, including the Uyantsa, where social relationships and their bonds with their lands are renewed.[264] Although the Court noted the "profound impacts on their social and spiritual relationships" and cultural identity, and the 'great concern and suffering' caused by the destruction of their cultural heritage and sacred sites[265] (relying not only on UNDRIP's Articles 11 and 12, but also those referring to self-determination, effective participation and consultations, including Article 32 in its legal analysis),[266] in acknowledging the failure of Ecuador to comply with its obligations it only mentioned the violation of the duty to consult but nothing about obtaining consent.[267] Some authors argue the

[261] The Kichwa consider that all the natural elements have spirits, Sarayaku, para 57 and paras 152-153.
[262] Ibid., paras. 104-105 and 218.
[263] Ibid., paras. 100 and 218.
[264] Ibid., paras 104-105 and 218.
[265] Ibid., paras 219-220.
[266] Ibid., paras. 215 and 217 and footnotes 283 and 288.
[267] Ibid., para 230. See Verbeek (n 127), p 281, criticising the Court for failing to consider the value of the land in its analysis, as well as the serious disruptions on their daily life. See also Newman et al (n 220), p 16.

Court found it unnecessary to address the latter, as Ecuador did not comply with the preliminary obligation to consult;[268] however, this was also the case in Saramaka.[269]

In a later case, *Kaliña and Lokono v. Suriname*, there were cumulative impacts that affected these Indigenous communities' physical and spiritual relationship with their lands and traditional way of life,[270] derived from the non-recognition of their collective rights to property, including the granting of mining concessions, the acquisition of lands by third parties and the maintenance of nature reserves in their territories.[271] For instance, Suriname authorised the construction of an urban project near their villages (disregarding their concerns and claims) along the Marowijne River, an essential element of their culture and spirituality,[272] restricting the access to the river, affecting its traditional use.[273] Similar restrictions were imposed on certain sacred sites and resources, fundamental for their identity and livelihood (including medicinal plants), as they were included within areas unilaterally declared natural reserves.[274] Finally, a concession for a bauxite mine was granted without prior consultations[275] or ESIA with Indigenous participation[276] (thus proceeding without properly evaluating possible effects on the communities).[277] This disturbed the balance between humans and nature[278] and caused serious damage to their environment and cultural and spiritual values, as sacred trees were logged, animals left the area due to noise and explosions (affecting the hunting), and the soil and water were contaminated, harming the fishing and causing traditional plants to

[268] L. Brunner and K. Quintana, "The Duty to Consult in the Inter-American System: Legal Standards after Sarayaku", ASIL Insights, Vol. 16, Issue 35, (2012); see also Rombouts (n 152), p 296.
[269] This was also a missed opportunity to clarify certain questions surrounding FPIC, such as the meaning of 'major impact' or 'large portion of territory'. See M. Orellana, "Saramaka People V. Suriname", AJIL Vol. 102, No. 4 (2008), p 846; and Verbeek (n 127), p 281.
[270] F. MacKay, "The Case of the Kaliña and Lokono Peoples v. Suriname and the UN Declaration on the
Rights of Indigenous Peoples: Convergence, Divergence and Mutual Reinforcement" ELR (April 2018) | No. 1, p 39.
[271] Kaliña Lokono paras. 114, 142, 160, 198, and 230, among others. See also MacKay (n 270), p 31.
[272] As explicitly noted by the Court, "local Indigenous peoples have a strong spiritual relationship" with this river. Kaliña Lokono, para. 98.
[273] Ibid., paras. 96-99, 147, and 152-154.
[274] Ibid., paras. 84 and 194-197.
[275] Ibid., para. 212.
[276] Ibid., para 226.
[277] Ibid., paras. 207 and 214.
[278] Ibid., paras 36 and 118. According to their beliefs, this can bring disease and misfortune. See IACHR, "Report No. 79/13 Case 12639 The Kaliña and Lokono Peoples v. Suriname" (2013)(Kaliña and Lokono Report'), para. 36.

stop growing.[279] As recognised by the IACtHR, these negative effects "continued over time, thus affecting the traditional territory and the means of survival" of these communities.[280] Mackay notes that these cumulative effects negated the Kaliña and Lokono peoples' ability to preserve, protect and guarantee the special relationship with their territories,[281] having then a substantive impact on their traditional way of life, been this a situation where consent should be required, as also concluded by the Commission in regards to the mining operations, following the *Saramaka* criteria.[282] Yet, and despite relying on UNDRIP's Articles 12 and 25 as well as on Articles 18 and 32, [283] the Court focused only on the 'consultation aspect' of effective participation (even leaving out the part about FPIC when citing Article 32), [284] continuing "a trend of minimising or omitting any discussion of the consent requirement", [285] that seemingly protects States' prerogative to make decisions regarding natural resources in their territories.[286]

All this indicates that, despite seemingly recognising strong participatory rights to Indigenous peoples in order to avoid the materialisation of serious and substantive harm, following a sliding-scale approach, in practice there is some uncertainty regarding the actual application of these strong safeguards when it comes to cultural/spiritual values.

3.2 The African Charter on Human and Peoples' Rights

The African Charter[287] is the main instrument in the African human rights system,[288] which also includes the 1990 African Charter on the Rights and Welfare of the

[279] Kaliña and Lokono, paras. 95, 118 and 217-220.
[280] Ibid., para. 222.
[281] MacKay (n 270), p 40.
[282] The IACHR observed that this "is precisely the type of activity that the Inter-American Court has stated should be subject to consultations and consent of the affected indigenous peoples". Kaliña and Lokono Report, para. 155.
[283] Kaliña and Lokono, paras. 180-181 and 202.
[284] Ibid., para 202; MacKay (n 270), p 41.
[285] Ibid., pp 40-41; Kaliña Lokono, para. 287, ruling that Suriname must take the necessary measures to ensure that no actions that could affect the Kaliña and Lokono peoples' territories are adopted without consultation.
[286] L. Lixinski, "Case of the Kaliña and Lokono Peoples v. Suriname", AJIL, Vol. 111:1(2017), pp 153-154. See also Young (n 152), p 182.
[287] Supplemented by the 1998 Protocol on the Establishment of the African Court on Human and Peoples' Rights ('African Court Protocol'); the 2003 Protocol on the Rights of Women in Africa; and

Child[289] and the 2011 African Charter on Democracy, Elections and Governance,[290] among others. This Charter recognises a series of rights and freedoms that States must respect and give effect to,[291] such as the rights to life (Article 4), to property (Article 14), to education and culture (Article 17), to self-determination (Article 20), to free disposal of wealth and natural resources (Article 21), and to economic, social and cultural development (Article 22),[292] and freedoms from discrimination (Article 2), of conscience and religion (Article 8), and association (Article 10), among others. Like the Inter-American system, there are two monitoring bodies in charge of supervising States' compliance with the African Charter.

a) The African Commission on Human and Peoples' Rights

Part II of the Charter establishes the ACHPR, with the mandate of promoting human and peoples' rights through studies, research and dissemination of information, among others;[293] interpreting the Charter, at the request of a State, an institution of the OAU[294] or an African organisation recognised by the OAU;[295] and protecting human rights,[296] through State reporting, activities of working groups and special rapporteurs, and its communication procedure.[297] In this procedure, the African Commission can receive inter-state complaints, or by individuals or NGO against

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the 2018 Protocol on the Rights of Older Persons in Africa. See https://www.achpr.org/resources [accessed January 2021].

[288] R. Murray, *The African Charter on Human and Peoples' Rights: A Commentary* (OUP 2019), p 2. See also ACHPR, "Celebrating the African Charter at 30: A guide to the African human rights system" (PULP 2011), p 7.

[289] OAU Doc. CAB/LEG/24.9/49 (1990), entry into force November 29, 1999.

[290] Adopted by the eighth ordinary session of the Assembly, held in Addis Ababa, Ethiopia (2007).

[291] African Charter, Article 1.

[292] In the context of the African Charter, 'culture' refers to a way of life. See ACHPR, "Principles and Guidelines on the Implementation of Economic, Social and Cultural Rights in the African Charter on Human and Peoples' Rights", (2011), p 8; and ACHR, "Communication No. 276/2003 Centre for Minority Rights Development (Kenya) and Minority Rights Group International on behalf of Endorois Welfare Council v. Kenya" (25 November 2009)('Endorois'), para. 241, noting that culture refers to a 'complex whole' which includes "a spiritual and physical association with one's ancestral land, knowledge, belief, art, law, morals [and] customs", among others.

[293] African Charter, Article 45.1.

[294] The OAU was transformed into the African Union in 2001. ACHPR (n 285), p 7.

[295] African Charter, Article 45.3, by issuing advisory opinions. See also ACHPR, "Rules of Procedure" (2020)('Commission Rules of procedure'), Rule 127.

[296] African Charter, Article 45.2.

[297] ACHR (n 286), p 17.

one or more States on alleged violations of human rights,[298] analyse its admissibility,[299] and, if admissible, examine the matter (with the possibility of reaching a friendly settlement),[300] adopting a decision (which, according to this Commission, are of a binding nature;[301] however, it recognises that there is a lack of compliance of its decisions and a 'general misgiving' regarding their binding nature by States[302]) and issuing recommendations[303] ('drawing inspiration' from other international law instruments like the UN Charter, customary law and general principles of law),[304] which are then transmitted to the parties and published.[305] The African Commission can decide to refer a communication to the African Court (with the consent of the complainants) before deciding on its admissibility, if the respondent has ratified the African Court Protocol, becoming the Commission an applicant in the proceedings.[306]

During its procedure, the ACHR can adopt provisional measures,[307] on its own initiative or at the request of a party, "to prevent irreparable harm to the victim or victims of the alleged violation as urgently as the situation demands."[308] While the language indicates an emphasis on direct harm, they seem to have broad effects that addressed potential harm; for instance, in the *Endorois* complaint (see below), it urged Kenya to ensure that no further issuance of mining concessions or transfers of

[298] African Charter, Articles 48-49 and 55.
[299] Ibid., Article 56.
[300] Commission Rules of procedure, Rule 123.
[301] Ibid., Rule 125; ACHR, "Resolution on the Importance of the Implementation of the Recommendations of the African Commission on Human and Peoples' Rights by States Parties", ACHPR/Res.97(XXXX)(2006); and "International Pen, Constitutional Rights Project, Interights on behalf of Ken Saro-Wiwa Jr. and Civil Liberties Organisation v. Nigeria, 137/94, 139/94, 154/96 and 161/97" (31 October 1998),('Saro-Wiwa'), paras 113-116; Murray (n 288), p 33; among others.
[302] ACHPR, "Report of the Second Regional Seminar on the Implementation of Decisions of the African Commission on Human and Peoples' Rights" (September 2018), pp 6-7. See also A. Majekolagbe and O. Akinkugbe, "The African Court of Human and Peoples' Rights Decision In the Ogiek Case: An Appraisal", in A. Manirabona & Y. Vega (eds), *Extractive Industries and Human Rights in an Era of Global Justice: New Ways of Resolving and Preventing Conflicts* (LexisNexis, 2019), p 180, mentioning that the creation of the African Court is "to 'breathe' enforceability into the African Human Rights System; and E. Tramontana, "The Contribution of the African Court on Human and Peoples' Rights to the Protection of Indigenous Peoples' Rights", (2018) Federalismi.it, p 18.
[303] Commission Rules of procedure, Rule 114; African Charter, Article 53.
[304] African Charter, Articles 60-61. As noted in the Endorois case, regarding Indigenous peoples, this includes jurisprudence of the IACtHR and the UNTS; the UNDRIP, and C169, among others.
[305] Commission Rules of procedure, Rule 120.
[306] Ibid., Rule 130; see also ACtHPR, "Rules of Court" (September 2020), ('Court Rules'), Rule 36.2.
[307] Which are binding, according to the ACHPR. See Saro-Wiwa, paras. 114-115.
[308] Commission Rules of procedure, Rule 100.1.

lands subject of the dispute occur,[309] aiming to protect the Endorois from foreseeable impacts but also their ability to potentially benefit in the future from their lands and resources.[310]

b) The African Court on Human and Peoples' Rights

The ACtHPR was established by the 1998 African Court Protocol[311] to "complement the protective mandate" of the African Commission,[312] having both an advisory jurisdiction to issue authoritative opinions "on any legal matter relating the Charter or any other relevant human rights instrument" at the request of any State member, organs or African organizations recognised by the African Union;[313] and an adjudicatory jurisdiction, addressing claims and disputes regarding the interpretation and application of the African Charter, the African Court Protocol and any other relevant human rights instruments ratified by the States concerned,[314] brought by the African Commission, a State Party or African Intergovernmental Organizations.[315] NGOs and individuals can submit cases only if the State Party has made a special declaration in this sense,[316] which is a factor in the small docket of judgments adopted on the merits.[317] In these proceedings, the Court must review the admissibility following Article 56 of the African Charter,[318] and if admissible, examine the case (with the possibility of reaching an amicable settlement),[319] rendering a binding judgment,[320] applying the African Charter and any other relevant human rights instruments ratified by the parties concerned;[321] if it finds violations of

[309] Endorois, para. 32.
[310] Ibid., para 124.
[311] Article 1. This protocol entered into force on January 25, 2004 after being ratified by more than 15 countries (currently 31). See https://www.african-court.org/wpafc/basic-information/
[312] Ibid., Article 2.
[313] Ibid., Article 4; Court Rules, Rule 82.
[314] African Court protocol, Article 3; Court Rules, Rule 29.1.
[315] African Court protocol, Article 5.1.
[316] Ibid., Articles 5.3 and 34.6. Court Rules, Rule 39.1. Currently only six parties have done so.
[317] Murray (n 288), p 11.
[318] The Court can also transfer a case to the Commission. African Court protocol, Article 6.
[319] Ibid., Article 9. Court Rules, Rule 64, requiring the Court to render judgment limited to the facts and solution adopted.
[320] African Court protocol, Articles 30 and 28; Court Rules, Rule 72.
[321] African Court protocol, Article 7. In Indigenous issues, the Court has cited jurisprudence of the IACtHR, reports from UN organs; and the UNDRIP, among others.

human rights, "it shall make appropriate orders to remedy the violation", including compensation.[322]

During this procedure, and in cases of "extreme gravity and urgency, and when necessary to avoid irreparable harm to persons" it shall adopt binding provisional measures, at the request of a party or *motu proprio,*[323] following a *prima facie* standard of proof.[324] These measures are often adopted regarding direct threats to life and personal integrity;[325] however, this Court granted provisional measures banning Kenya from conducting transactions of land in the ancestral home of the Ogiek peoples that could directly result in their eviction and harassment, but also looking to avoid broader potential effects on their traditional livelihood,[326] indicating an awareness of the importance of a broader approach regarding Indigenous peoples' rights.

3.2.1 Indigenous peoples' rights in the African Charter

The African Charter does not mention 'Indigenous peoples', but an increasing number of conflicts regarding their rights over lands and natural resources in Africa have enabled the monitoring bodies to elaborate on this issue in the context of the African Charter[327] (although there is not nearly as much jurisprudence as in the Inter-American system), taking into account Indigenous peoples' particular way of life, intimately connected to their lands and resources, and their spiritual/cultural aspects.[328] Unlike the IACtHR and its focus on the right to property, the protection of this special relationship and various aspects of Indigenous peoples' traditional way of

[322] Ibid., Article 27.1; Court Rules, Rules 69 and 71.
[323] African Court protocol, Article 27.2; Court Rules, Rule 59.1 and 59.6. This is decided on a case-by-case basis.
[324] See for instance ACtHPR, "African Commission on Human and Peoples' Rights v. Kenya (Order of Provisional Measures)" Application No 006/2012, March 15, 2012 ('Ogiek provisional measures'), para. 16; Court Rules, Rule 41.9.
[325] See https://www.african-court.org/cpmt/provisional-measures
[326] Ogiek provisional measures, para. 10.
[327] R. Home and F. Kabata, "Turning Fish Soup back into Fish: the wicked problem of African Community Land Rights" Journal of Sust. Dev, Law & Policy Vol 9(2018), pp 2-3; Barelli (n 51), p 261.
[328] See for instance Endorois, paras. 150-156, among others; and ACtHPR, "African Commission on Human and Peoples' Rights v. Kenya (Judgment)" Application No 006/2012, May 26, 2017 ('Ogiek'), paras. 109, 164-165, 180-183, among others.

life is linked to several interrelated rights recognised in the African Charter, to which I turn now.

In 2010, the African Commission issued a decision about the situation of the Endorois in Kenya, who traditionally inhabited the Lake Bogoria area before being forcefully evicted by the State (and their access to these ancestral lands for cultural and spiritual purposes denied) without prior consultation, to establish a protected area and a mining operation.[329] The ACHPR, based on the fact that there was no dispute regarding the Lake Bogoria area being the traditional land of the Endorois, recognised their collective right to property under Article 14 (which includes undisturbed possession, use and control, as well as rights, interests and benefits of communities in their lands)[330] over their "ancestral lands, the possessions attached to it and their animals",[331] and their natural resources (Article 21) "contained within".[332] It also mentioned the need for 'special measures of protection' to safeguard Indigenous peoples' physical and cultural survival and their particular relationship with their lands (heavily drawing inspiration from the *Saramaka* case),[333] such as titling, demarcation and delimitation of their territories.[334] However, these rights are not absolute, and can be encroached upon 'in the interest of public need/general interest of the community' (a particularly stringent requirement in the case of Indigenous peoples, because of the importance of their lands and resources to their survival and self-determination)[335] and 'in accordance with appropriate laws',[336] which, to the ACHPR (citing almost verbatim the *Saramaka* case), includes the 'effective participation' of Indigenous peoples, i.e., prior ESIAs with Indigenous

[329] Endorois, paras. 1-14. This was the first case recognising Indigenous peoples' rights over their ancestral lands and their right to development.
[330] Ibid., paras. 186-187.
[331] Ibid., para. 184.
[332] Ibid., para. 267. See also ACHPR, "Communication No. 155/96 Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR) v. Nigeria" (27 May 2002), paras. 56-58. Pentassuglia (n 216), p 188, notes that this refers to all the natural resources found on or beneath the land.
[333] Endorois, paras. 197-198 and 260-267.
[334] Ibid., paras. 205-209.
[335] Ibid., paras. 212-214 and 266. By engaging in forced evictions, this requirement was not met, para. 218.
[336] Ibid., paras. 211 and 267.

participation, and consultations, in order to preserve and protect the special relationship that they have with their lands.[337]

This issue is also analysed in regard to Article 22, the right to development, where the African Commission considers the existence of a two-pronged test.[338] The first part is a procedural aspect that consists of the 'effective participation' of the affected people before conducting development projects, i.e., 'prior consultations'[339] which, following the IACtHR jurisprudence, must be in good faith, with the State disseminating and accepting information, through culturally appropriate procedures and with the objective of reaching an agreement.[340] Moreover, in the case of any development or investment projects that would have a major impact on Indigenous peoples' territories, it is necessary to obtain FPIC,[341] adopting the strong standard of protection recognised by the IACtHR, with FPIC acting as a heightened safeguard. The second prong refers to the substance of the right to development, i.e., the empowerment of the communities and increasing their well-being, which in this case means, among other things, obtaining some benefit from the project.[342] The State failed both prongs of the test, merely informing the Endorois about the establishment of a reserve, without clarifying the extent of the impacts on their traditional way of life, severely affecting their quality of life.[343]

Regarding cultural and spiritual aspects, the African Commission recognised the Endorois' special link with their ancestral lands and its manifestations, such as a pastoralist way of life, the use of natural resources, their spiritual beliefs, maintaining sacred sites and ceremonial practices around the Lake Bogoria (the spiritual home of all Endorois, living and dead), mainly in the context of Articles 8 (freedom of conscience and religion) and 17.2 and 17.3 (cultural rights).[344] Like other rights, they admit proportionate and reasonable restrictions, established by law, and applied "not

[337] Ibid., paras. 226-228 and 266-268, also noting that Kenya failed to guarantee this effective participation.
[338] Ibid., para. 277.
[339] Ibid., para. 281.
[340] Ibid., para. 289. See also para. 226, noting that States have an obligation to "consult and to *seek* consent".
[341] Ibid., para. 291.
[342] Ibid., paras. 283-288 and 294-295
[343] Ibid., paras. 281-282 and 290-298.
[344] Ibid., paras. 165-167, and 249-251

in a manner that would completely vitiate the right"[345] The ACHPR noted that the forced eviction from their lands "removed them from the sacred grounds essential to the practice of their religion", making it virtually impossible to maintain their cultural and spiritual practices,[346] denying as well "the very essence of the Endorois' right to culture".[347] The duty to consult/FPIC was not mentioned in this context, but these impacts played an important role in the considerations of the ACHPR throughout the complaint, consistently highlighting how the violations of the rights to property, natural resources and development, as well as the absence of ESIAs and adequate consultations, substantially affected the Endorois' spiritual and cultural aspects,[348] indicating that the notion of 'major impacts' and the strong degree of protection granted by the duty to obtain consent (inspired by the IACtHR) also applies to substantive threats to these immaterial aspects of Indigenous peoples' traditional livelihood.

Finally, while the ACHPR did not explicitly highlighted the role of TK (incorporated in decision-making via consultations and ESIAs, as previously mentioned) in avoiding potential harm, it can be argued that the heavy reliance on the *Saramaka* case indicates an implicit recognition of this role in the identification of possible risks and the evaluation of less-harmful alternatives for the environment and their traditional livelihood. For instance, the ACHPR notes that the Endorois, as 'ancestral guardians of the land', are "best equipped to maintain its delicate ecosystems" and highlighted their willingness to work with the State in their conservation work,[349] sharing their knowledge.

The African Court also approached the protection of Indigenous peoples' special relationship and traditional way of life by focusing on multiple rights of the African Charter, as noted in a more recent case, *Ogiek v. Kenya*, albeit without touching on various issues addressed in *Endorois*, such as the practical implications of the recognition to the rights to property (i.e., the duty to demarcate, delimit and title Indigenous lands); the extent of Indigenous peoples' right to natural resources or

[345] Ibid., paras. 172 and 249.
[346] Ibid., para 173
[347] Ibid., para 251.
[348] See for instance ibid., paras 210, 227-228, 244, 260-267, 286-293 and 298.
[349] Ibid., paras. 215 and 235.

to development; and ESIAs or consultations' requirements (neither the role of TK in addressing potential threats), prompting an author to consider the legal analysis "often scant and poorly articulated".[350]

In 2017, the ACtHPR issued a judgment about the situation of the Ogiek peoples in Kenya, who inhabited the Mau Forest complex before being forcefully evicted from their ancestral lands, without prior consultations, arguably to protect the environment, although subsequently some logging concessions in the area were granted.[351] The ACtHPR, noting that there was no dispute about the Mau Forest being the traditional home of the Ogiek, recognised their collective right to property under Article 14 over these ancestral lands, which includes possession, occupation, use and control of them,[352] and the enjoyment and use of their natural resources (Article 21), as among the rights recognised under Article 14 is also the right to use and to enjoy the produce of the land.[353] The African Court mentioned that these rights admit necessary and proportional restrictions, established in the public interest;[354] however, the State was unable to prove that the presence of the Ogiek on the Mau Forest caused environmental harm, and thus their eviction "without prior consultation and without respecting the conditions of expulsion in the interest of public need", was not proportional or necessary to achieve the purported justification of environmental protection.[355] In regards to the interconnected right to development (Article 22), the African Court did not refer to the two-pronged test mentioned in *Endorois* (thus not addressing the question of FPIC), nor the scope of this right to development in the African Charter, simply ruling that because the evictions affected their development and were done without effective consultations, this right was violated.[356]

Similar to the *Endorois* case, the recognition of the special relationship that the Ogiek have with their lands and resources was mainly addressed through the lens

[350] Tramontana (n 302), pp 9-10 and 19; see also Majekolagbe and Akinkugbe (n 302), p 195.
[351] Ogiek paras 6-7. This was the first time the Court addressed the issue of Indigenous peoples' rights. Majekolagbe and Akinkugbe (n 302), p 163. The Court has not to date ruled on the reparations.
[352] Ogiek, paras. 127-128.
[353] Ibid., paras. 124-128 and 200-201.
[354] Ibid., paras 129 and 201.
[355] Ibid., paras 130-131 also noting that the evidence show that the factors behind environmental degradation were encroachment from their parties and ill-advised logging concessions
[356] Ibid., para 210. See also Tramontana (n 302), p 17, criticising the lack of elaboration of this rationale, especially in the light of the Endorois case.

of freedom of religion and cultural rights, with the ACtHPR highlighting the need for Indigenous peoples to have access to their lands and natural environment to engage in their cultural and spiritual practices.[357] In the case of the Ogiek, the Mau Forest is recognised as their spiritual home and centre of their religion and cultural manifestations, such as a distinct way of life as a hunter-gatherers; the practice of traditional medicine; traditional wedding ceremonies and burial rituals; the maintenance of sacred sites; and the use of natural resources.[358] It also noted that the preservation of their traditional way of life and culture "is of particular importance", as they have often been affected by economic activities from third parties and 'large-scale developmental programmes',[359] a reference to their right to development. The African Court noted that the eviction from the Mau Forest and the access restrictions imposed did not allow the Ogiek peoples to undertake their religious practices and 'greatly affected' their ability to preserve their traditions,[360] constituting unjustifiable interference with the freedom of religion and cultural rights.[361] Like the ACHPR, the African Court did not mention the duty to consult in the context of these rights; however, it did point out that the evictions without prior consultations "have adversely impacted on their economic, social and cultural development" in the context of Article 22.[362] Also, and as noted above, the evictions from their lands without consultations violated their right to property, interpreted by the ACtHR in the light of UNDRIP's Article 26.2, which, among other things, recognises the 'traditional' use of their lands and resources,[363] including cultural and spiritual practices. This implies that the protection of Indigenous peoples' spiritual and cultural rights requires consultations; however, the way in which these consultations must be conducted are not specified by this Court, nor if ESIAs are also required.

Furthermore, and despite its reliance on UNDRIP, it sidestepped the question of FPIC, opting "for the lesser 'effective consultation' standard".[364] This is despite the (uncontested) claims that some sacred sites in the Mau Forest have been

[357] Ogiek, paras. 164 and 180-181.
[358] Ibid., paras. 165 and 182-183.
[359] Ibid., para 180.
[360] Ibid., paras 166 and 183.
[361] Ibid., paras 169 and 189.
[362] Ibid., para 210.
[363] Ibid., paras 126-127 and 131; see also paras. 200-201, recalling this in the context of the violation of the right to natural resources.
[364] Majekolagbe and Akinkugbe (n 302), p 195.

destroyed and, due to the lack of access, the knowledge about others sites has not passed on by the elders to the younger generations, affecting the Ogieks' whole spiritual life and entire existence as peoples.[365] Moreover, as also acknowledged by the ACtHPR, the impacts were so significant that it was impossible for the Ogieks to continue with their religious practices.[366] In other words, there was a substantive impact on the Ogieks' cultural and spiritual relationship with their environment, threatening their survival as peoples; yet, this Court failed to uphold the stronger protection established in *Endorois*, FPIC. This leaves open the question about the precise standards of protection applicable to indigenous peoples in the African System when it comes to substantive spiritual/cultural effects and/or major impacts on their territories.

3.3 Assessment

These two regional systems play a central part in protecting human rights; as such, they have also accommodated Indigenous peoples' claims, despite not being mentioned in the American Convention or the African Charter, developing important standards through their jurisprudence. In particular, there is a clear recognition in both systems of a collective rights to property and of the particular relationship that they have with their lands and resources (which includes social, cultural, spiritual and environmental aspects), aligning these regional instruments with international standards, such as UNDRIP and C169. When it comes to Indigenous peoples' effective participation in decision-making, the Inter-American system has elaborated in much more detail how to ensure this and protect Indigenous peoples' rights, under the right to property, explaining how consultations should be conducted as well as the standards required in regard to ESIAs. In addition, there is a duty to obtain FPIC in situations of 'large-scale developments that would have a major impact' on Indigenous lands (which includes cumulative impacts and should be interpreted in a broad way), providing a strong protection for Indigenous peoples and clear requirements that enable the incorporation of their TK in decision-making, to identify risk, propose alternatives and avoid potentially serious/substantive impacts

[365] Ogiek, para 158 and 160.
[366] Ibid., para. 168.

on their traditional way of life and environment. That being said, the subsequent practice of the IACtHR raises some doubts about the implementation of this criterion in regard to substantive effects on cultural and spiritual values, due to its reluctance to engage with the issue of FPIC in the face of devastating impacts on sacred sites, customs and traditions.

The African system for its part frames the issue of Indigenous participation mostly in the context of three rights, to property, to natural resources and to development, and the recognition of their special relationship with their lands in the context of the rights to religion and to culture. Interestingly, the Commission incorporates these safeguards of consultations, ESIAs and consent in nearly identical terms as the IACtHR (although approaching the question of TK and the avoidance of potential risks more implicitly), as it was heavily inspired by its jurisprudence; in fact, it can be argued that it provides a better implementation of FPIC in regard to serious/substantive impacts on the spiritual and cultural aspects of Indigenous peoples' livelihood, as noted in the analysis of the *Endorois* case. However, the implementation of these strong safeguards in the African system is unclear, as the African Court has recently failed to uphold them (except for the duty of prior consultations, although the Court did not dwell into it in more detail), even in the case of (potentially) substantive impacts.

This means that, despite the recognition of a strong participatory structure, some degree of uncertainty remains when it comes to the consistent implementation of FPIC and the protection of Indigenous peoples' rights in the face of substantive harm, especially those of an immaterial nature.

4. Concluding remarks

The UNDRIP and the regional supervisory bodies play an important role in Indigenous issues, recognising a series of rights and establishing important safeguards that allow them to protect their traditional livelihood and their special relationship with their lands and resources, which, as they cannot be determined *in abstracto*, are aspect where there are often uncertainties about the possible effects that certain projects could have, as they are difficult to assess. Building upon the

work of previous instruments such as C169, we can find among these safeguards the duty to consult Indigenous peoples, so they can influence the outcome of the decision-making process, explained in detail in both UNDRIP and the Inter-American system (and relying on the latter, in the African Commission), as well as the requirement to conduct impact assessments, implicit in UNDRIP but more advanced in the jurisprudence of the IACtHR (even integrating the Akwe:Kon Guidelines as the 'best standard') and, by extension in the African system through the African Commission. Both mechanisms enable the incorporation of TK in decision-making, allowing them to identify potentially serious social, cultural and environmental effects and consider alternatives, minimising or avoiding the materialisation of harm, as especially noted by the Special Rapporteur and EMRIP in the context of UNDRIP, as well as the IACtHR in *Saramaka*, thus having a precautionary role.

Consent is generally an objective of consultations; however, UNDRIP requires it in the cases of relocations and the storage of hazardous materials in Indigenous lands, which constitutes an improvement compared to previous instruments, especially C169. Both situations threaten Indigenous peoples' survival, being then FPIC a heightened safeguard that meets the level of the threat. Furthermore, and based on the spirit of the Declaration and the right to self-determination, a majority of authors argue that UNDRIP requires Indigenous peoples' consent in the case of major negative impacts on their traditional way of life (including spiritual and cultural impacts), providing a strong implementation of FPIC; yet, this approach is disputed by authors that consider UNDRIP as an instrument that perpetuates a colonial mentality which, when there is no agreement, leaves the final determination to States, an approach that the latter seem to have relied upon in practice. In this context, spiritual and cultural values (as well as their manifestations, such as sacred sites), which are often seen as a private matter by States, would not be adequately protected, even if their disruption could threaten Indigenous peoples' survival as peoples.

The question of consent in the Inter-American system has been developed in the context of Indigenous peoples' collective right to property, by which 'large-scale developments that would have major impacts' of their lands require FPIC, replicating

the idea of consent being a higher safeguard and ensuring a strong protection of their rights. Although at first it may seem that this is a requirement linked to material aspects, both the IACtHR and the IACHR have interpreted it broadly, based on a sliding-scale approach, which would include the protection of cultural and spiritual values. However, the subsequent practice of the Inter-American Court where, despite the acknowledgement of devastating effects on sacred sites, spiritual landmarks, and disruptions to vital ceremonies, the IACtHR omitted any references to FPIC, seemingly undermines this safeguard in favour of an approach that protects States' ability to have the final decision in relation to natural resources.

The case of the African system, where the question of FPIC is discussed mainly in relation to the interconnected rights to property, to development, and to natural resources, is very interesting: on the one hand, there is the African Commission, which has been inspired by the IACtHR and fully adopted this strong FPIC standard, and it can be argued that it even applied it to the protection of spiritual and cultural values. On the other hand, there is the African Court which, in a more recent case, did not refer to the duty to obtain FPIC, even when acknowledging that there were substantive impacts on the Ogieks' traditional way of life, including cultural and spiritual ones, threatening their survival as peoples, focusing only on the lesser duty to consult and thus casting doubt on the precise nature of the protection granted by the African system.

I will now move on to the question of how the precautionary principle can contribute to address these problems.

Chapter VI: The Precautionary Principle, Traditional Knowledge and the Protection of Indigenous peoples' way of life

1. Introduction

Indigenous peoples' traditional way of life is characterised by a profound relationship with their territories and resources, manifested in various ways across the different parts of the world, e.g., traditional practices like hunting and fishing; ceremonies and rituals; the maintenance of sacred sites; and particular beliefs, among others. Generally speaking, this makes it difficult to understand and anticipate with certainty how determined activities taking place on their lands could affect Indigenous peoples (and to what degree), especially when it comes spiritual and cultural aspects specific to them. As previously noted, this makes it essential to rely on locally developed systems of knowledge that support their traditional livelihood, known as 'traditional knowledge', able to provide an important amount of information about customs, practices, risks, threats, and possible ways to avoid impacts on their way of life.[1]

[1] See Chapter III, sections 3-5.

While this traditional knowledge is incorporated in decision-making through consultations and impact assessments, the discussions surrounding Indigenous peoples' participation in decision-making mostly focus on issues about their self-determination and consent,[2] as highlighted in the last two chapters. This has seemingly drawn attention away from the role of traditional knowledge and consultations/impact assessments in avoiding the materialisation of potentially non-negligible harm to Indigenous peoples' way of life when there are activities conducted on their lands. Thus, the aim of this chapter is to analyse how a 'wider' precautionary principle i.e., one that incorporates traditional knowledge as a scientific basis for the adoption of precautionary action, can strengthen the protection of Indigenous peoples' rights, when States' actions may affect their lands and territories.

In order to do this, and drawing from previous chapters, I begin by briefly contextualising the importance of traditional knowledge as a source of scientific knowledge, that allows for a better understanding of Indigenous peoples' livelihood, including risks and threats (especially those of a cultural/spiritual nature). This provides the best information available necessary regarding reasonable grounds for concern about potential threats of harm derived from these States' activities, highlighting the need to consider it when decisions are being adopted. I then analyse the way in which Indigenous peoples are able to influence decisions, arguing that, considering the rationale behind Indigenous consultations and impact assessments, and the way in which they are implemented, they act as precautionary measures. This precautionary character in turn means that Indigenous knowledge and interests, and concerns must be accommodated in the decision, at the risk of failing to avoid potentially serious harm to Indigenous peoples' traditional way of life. This also has implications for the situations where free, prior and informed consent ('FPIC') is a requirement of consultations, often limited by issues related to Indigenous peoples' self-determination and control over their lands, as mentioned in previous chapters. In this context, I argue that obtaining FPIC constitutes a heightened precautionary

[2] See for instance J. Anaya, "Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous People", UN Doc. A/HRC/12/34, 15 July 2009, ('2009 Report'), para. 46-49; V. Tauli-Corpuz, "Report of the Special Rapporteur on the rights of indigenous peoples", A/HRC/45/34, 18 June 2020 ('2020 Report'), para 61; and Chapters IV, section 6 and V section 2.2, among others.

safeguard, following a logic of 'the higher the risk the greater the need for precaution',[3] moving away from these controversies and ensuring that traditional knowledge is actually considered before the adoption of projects and developments on their territories. Finally, as Indigenous peoples' rights are not absolute, I analyse the situation of circumventing Indigenous peoples' FPIC, including possible tensions between this requirement and the need to act in order to avoid the materialisation of potentially serious or irreversible harm to values important for society at large (or even Indigenous peoples themselves). I do this by considering three scenarios: situations where a rapid response is needed; the establishment of conservation areas in Indigenous lands; and measures to mitigate the potential effects of climate change. This chapter finishes with some concluding remarks.

2. Indigenous peoples' traditional knowledge, decision-making and precaution

As mentioned in previous chapters, Indigenous peoples have a particular way of life, based on a special relationship with their lands, where spiritual, cultural, environmental and social aspects are deeply intertwined. This traditional livelihood, which constitutes an essential part of their cultural identity and survival as peoples, is closely linked to the (sustainable) use of their territories and natural resources, and is influenced by their territories, history, and worldview. This is manifested in various ways, such as particular rituals and ceremonies; traditional medicinal practices; activities such as hunting, fishing or herding, among many others; and the establishment and maintenance of sacred sites and particular landmarks like rivers and mountains. Furthermore, Indigenous peoples have developed a local system of knowledge, tested and improved during long periods of time in a rigorous and systematic way, able to provide answers and predict outcomes, known as traditional knowledge, which provides them an integral understanding of their environment, underpinning their traditional way of life.

[3] M. Kamminga, "The Precautionary Approach in International Human Rights Law: How It Can Benefit the Environment" in in D. Freestone and E. Hey (eds), *The Precautionary Principle and International Law: The Challenge of Implementation* (Kluwer, 1996), p 185; see also Chapter II, section 4.1.

The various factors that influence Indigenous peoples' development means that their livelihood, cosmovision and culture cannot be determined *in abstracto*,[4] which also makes it difficult to assess with certainty how they could be affected by measures and actions taking place on their lands and territories, especially regarding effects on their spiritual and cultural aspects. In this sense, physical actions that may seem inconsequential from an outsider perspective could cause serious or substantial harm. For instance, the mere presence of foreigners in Indigenous peoples' lands could desecrate sacred sites, as mentioned in the case of the Suba peoples in Chapter III. Physical impacts could disrupt traditional ceremonies and force spirits to abandon certain places, rendering them sterile, as it happened to the Kichwa peoples, analysed in the previous chapter; taking elements from Indigenous territories without following cultural rules could affect their cosmovision and cultural integrity, as noted in the case of the U'wa in Chapter IV. Finally, development projects may affect the relationship that Indigenous peoples have with their lands, animals and/or plants and disturb ancestors' resting places,[5] among other possible consequences.

In this context of uncertainties and non-negligible threats, the recognition in international law of traditional knowledge as 'scientific', allows its integration into the precautionary element of 'scientific uncertainty', enabling the use of this knowledge as the basis for the adoption of precautionary action.[6] This knowledge constitutes the 'best information available' about their traditional way of life, including credible evidence, 'reasonable grounds for concern', about possible risks and how to address them, leading to the adoption of effective actions to avoid the materialisation of potential impacts on their livelihood, their special relationship with their lands, and their cultural identity.[7]

In general, and following the analysis made in previous chapters, international law enables Indigenous peoples to influence decision-making processes

[4] Human Rights Committee ('HRC'), General Comment No. 23: Article 27(Rights of Minorities), 8 April 1994, CCPR/C/21/Rev.1/Add.5; Inter-American Court of Human Rights ('IACtHR'), "Case of the Yakye Axa Indigenous Community v. Paraguay (Merits, Reparations and Costs)" Judgment of June 17, 2005, para. 146; Inter-American Commission on Human Rights ('IACHR'), "Indigenous and Tribal Peoples' Rights over their Ancestral Lands and Natural Resources" OEA/Ser.L/V/II. Doc 56/09 (30 December 2009) ('Ancestral lands'), para. 264, among others.

[5] I. Watson, "First Nations, Indigenous Peoples: our laws have always been here" in I. Watson (ed), *Indigenous Peoples as Subjects of International Law* (Routledge, 2018), p 109.

[6] See Chapters II, section 4.3.1 and III section 4.1.

[7] See Chapters II, sections 3.2 and 4.3.1, and III, sections 3-5.

and incorporate their knowledge through consultations, with the objective to obtain their FPIC or agreement. These consultations must be conducted in conjunction with impact studies with their participation,[8] which play a central role in regard to the element of 'informed consent' at the heart of consultations.[9] The former Special Rapporteur highlighted that this is aimed to reverse "the historical pattern of exclusion from decision-making, in order to avoid the future imposition of important decisions on indigenous peoples, and to allow them to flourish as distinct communities on lands to which their cultures remain attached",[10] indicating an emphasis on participation. Similarly, the majority of the discussions and controversies surrounding this issue are about self-determination and control over the participatory process,[11] drawing attention away from another important aspect, related to the precautionary principle, to which I turn now.

2.1 Precaution, consultation and impact assessments

Consultations (and impact assessments) are required before the adoption of measures that *may* affect Indigenous peoples, according to the 2007 UN Declaration on the Rights of Indigenous Peoples ('UNDRIP') and the International Labour Organization 1989 Indigenous and Tribal Peoples Convention ('C169').[12] This occurs "when the interests or conditions (…) that are particular to them are implicated in the decision,

[8] See for instance Report of the Tripartite Committee submitted following a Representation under article 24 of the ILO Constitution regarding C169: Ecuador 2001 GB.277/18/4, para. 38; J. Anaya, "Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous Peoples, Extractive industries and Indigenous peoples", 1 July 2013, A/HRC/24/41 ('2013 Report'), para. 65; G. Pentassuglia, "Towards a Jurisprudential Articulation of Indigenous Land Rights", EJIL (2011), p 184; chapter IV sections 3.3.1 and 6; Chapter V, sections 2.2, 3.1.2 and 3.2 a), among others.

[9] Creik notes that separating consultations from impact assessments could result in consultations becoming meaningless and isolated from the broader information and decision-making process. N. Creik, *The International Law of Environmental Impact Assessment: Process, Substance and Integration* (CUP, 2008), p 32. See also Chapter V section 2.2.1; 2009 Report, paras. 53 and 70; and Study of the Expert Mechanism on the Rights of Indigenous Peoples, "Free, prior and informed consent: a human rights-based approach" ('EMRIP Report 2018') 10 August 2018, A/HRC/39/62, para. 22, among others.

[10] 2009 Report, para. 41; 2020 Report, para. 50. See also D. Leydet, "The Power to Consent: Indigenous Peoples, States and Development Projects", University of Toronto Law Journal, Vol 69 No 3 (2019), p 372.

[11] See Chapter IV, section 6.3 and Chapter V section 2.2.3.

[12] Indigenous and Tribal Peoples Convention, C169, 27 June 1989, C169, entered into force 5 September 1991, Article 6.1(a); UN General Assembly, "UN Declaration on the Rights of Indigenous Peoples", 2 October 2007, A/RES/61/295, Article 19.

even when the decision may have a broader impact",[13] which is especially relevant regarding their particular cultural aspects and identity,[14] often threatened in ways that are "not felt by others in society".[15] In this context, the Expert Mechanism on the Rights of Indigenous peoples ('EMRIP') remarks that Indigenous peoples should have a major role in establishing if "the potential broader impact of a decision" affects them, as they "may highlight possible harms that may not be clear to the State or project proponent, and may suggest mitigation measures to address those harms".[16] This indicates that, to initiate the consultation process, there must be something more than a mere belief or hypothesis, some credible evidence that Indigenous peoples' interests or concerns are involved and could be affected by a proposed measure, i.e., that there are 'reasonable ground for concern', in line with the precautionary element of 'scientific uncertainty'.[17] Moreover, this evidence can be provided by Indigenous peoples themselves, recognising the important role of traditional knowledge as a scientific basis for precaution, identifying risks that States are often unable or unequipped to fully understand. This is often the case when it comes to activities taking place on their lands and territories, which could threaten their livelihood on several levels, including physical, cultural and spiritual.

The remaining two elements of the precautionary principle, i.e., the existence of a 'threat' of a 'serious/irreversible' nature to Indigenous peoples' way of life and environment, are also present in the various instruments, reports and jurisprudence regarding consultations and impact assessments. For example, according to the *travaux preparatoires* of the C169, the rationale behind States' obligation to carry out studies "in cooperation with the peoples concerned, to assess the social, spiritual, cultural and environmental impact on them of planned development activities",[18] was to allow for the careful assessment of "potential impacts" of these activities on them and their relationship with their lands, especially in the context of large-scale projects, which often have effects of a non-negligible nature.[19] The ILO Tripartite

[13] 2009 Report, para 43; 2020 Report, para. 57.
[14] Ancestral lands, para. 276.
[15] 2009 Report, para 43; EMRIP Report 2018, para 33. See also Chapter III, sections 3-5.
[16] EMRIP Report 2018, para. 34.
[17] See Chapter II, sections 3.2 and 4.3; Chapter III, sections 4-5.
[18] C169, Article 7.3
[19] International Labour Office, "Partial revision of the Indigenous and Tribal Populations Convention 1957(No 107) Report VI(1)" 75th Session (1988) ('ILO travaux report VI(1)'), p 65.

Committee, in cases involving potentially serious effects on Indigenous peoples' lives and territories from the exploitation of natural resources in their lands, has also noted a similar role for consultations.[20] The Special Rapporteur for her part mentioned that 'adequate consultation processes' must provide enough time for Indigenous peoples to fully understand "possible environmental, health and other risks", and that international standards require independent social, cultural, and environmental impact assessments, with Indigenous participation, that cover "the full spectrum of rights that could be affected by a measure or project" on their lands, in order to identify possible impacts, alternatives and mitigation measures.[21] In cases where there were non-negligible effects on Indigenous peoples from extractive activities in their lands, the IACtHR ruled that States must guarantee their effective participation in decision-making, by conducting consultations and environmental and social impact assessments ('ESIAs') with Indigenous participation, and ensure that they are "aware of possible risks", so they can knowingly and voluntarily accept the development proposed, preserving and protecting their special relationship with their lands and environment.[22] It also noted that ESIAs "serve to assess the possible damage or impact [that] a proposed development or investment project may have on the property in question and on the community", including how "existing and future activities could jeopardize the survival" of Indigenous peoples.[23]

It is also important to recall the 2005 UN Permanent Forum on Indigenous Issues ('UNPFII') report about free, prior and informed consent[24] (which has influenced the interpretation of C169,[25] UNDRIP,[26] and the jurisprudence of the

[20] See Report of the Tripartite Committee, submitted following a Representation under Article 24 of the ILO Constitution regarding ILO C169: Colombia 2001 (GB.276/17/1), paras. 84-93 and Chapter IV sections 6.1-6.2.
[21] 2020 Report, paras. 56-58; EMRIP Report 2018, paras 22. (b), 33-34 and 44.
[22] See for example, IACtHR, "Case of the Saramaka People v. Suriname (Preliminary Objections, Merits, Reparations and Costs)" Judgment of November 28, 2007 ('Saramaka'), paras 129 and 133, and "Case of the Saramaka People v. Suriname (Interpretation of the Judgment on Preliminary Objections, Merits, Reparations and Costs)" Judgment of August 12, 2008 ('Saramaka interpretation'), para. 40, among others. See also Ancestral lands, paras. 267 and 308-309, also noting how Indigenous peoples can identify possible risks to their special relationship with their lands and alternatives/mitigation measures.
[23] Saramaka interpretation, paras. 40-41.
[24] UN Economic and Social Council, Permanent Form on Indigenous Peoples, "Report on Free, Prior and Informed Consent", UN Doc.E/C.19/2005/3, 17 February 2005. ('UNPFII Report').
[25] See for example, International Labour Standards Department, "Indigenous & Tribal Peoples' Rights in practice: A Guide to ILO Convention No 169" (2009), p 63
[26] See Chapter V, section 2.2.3.

IACtHR),[27] which states that 'informed' refers to the information provided during consultations, and should include a "preliminary assessment of the *likely* economic, social, cultural and environmental impact, *including potential risks* (…) in a context that *respects the precautionary principle*"[28] [emphasis added]. Finally, in the context of the biodiversity regime, there are the Akwe:Kon Voluntary Guidelines, [29] considered by the IACtHR as the standard that must be followed regarding ESIAs.[30] These guidelines, expressly guided by a precautionary approach,[31] have the aim to, among other things, incorporate Indigenous peoples cultural, environmental and social concerns and interests (as well as their knowledge and practices) in impact assessments procedures (which also include consultations at different stages), to avoid "potential adverse impacts on the[ir] livelihoods".[32]

Following this analysis, it is clear that the duty to conduct consultations/impact assessments, established in various instruments and recognised by international jurisprudence, is triggered when there are reasonable grounds for concern about 'potential adverse impacts on their livelihoods'; 'likely economic, social, cultural and environmental impacts'; and 'possible risks' that Indigenous peoples must be made aware of (including those that could 'jeopardise their survival' as peoples), among other situations that could affect them in significant ways, i.e., when there are threats of serious or irreversible damage to their traditional way of life, in a context of lack of full scientific certainty. In this sense, consultations and impact assessments act as precautionary measures,[33] that enable the incorporation of traditional knowledge in decision-making. This means that States, before doing any activities on Indigenous peoples' lands, are under the obligation to not only conduct these consultations and impact studies, but are also to avoid the materialisation of

[27] IACtHR, "Case of the Kichwa Indigenous People of Sarayaku v. Ecuador (Merits and Reparations)" Judgment of June 27, 2012, para. 208 and footnote 244.
[28] UNPFII Report, p 12.
[29] Secretariat of the Convention on Biological Diversity, "Akwe: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessments regarding Developments proposed to take place on, or which are likely to impact on, Sacred Sites and on Lands and Waters Traditionally occupied or used by Indigenous and Local Communities" (CBD Guideline Series, 2004) ('Akwe:Kon'). See Chapter III section 6.1.
[30] Saramaka interpretation, para. 41.
[31] Akwe:Kon, para. 61.
[32] Akwe:Kon, foreword and introduction. See also Chapter III section 6.1
[33] As mentioned in Chapter II, consultations and impact assessments have been generaly recognised as precautionary measures. Chapter II, section 4.1.

potentially non-negligible harm to Indigenous peoples' traditional way of life. In this context, they need to rely on the vital scientific role of traditional knowledge as the best information available about risks, alternatives and uncertainties, especially in regard to spiritual and cultural aspects, at the risk of failing to comply with their precautionary duties.[34]

There are two important implications here. First, if after consultations/impact studies an agreement is not reached or FPIC is not obtained, Indigenous peoples' knowledge, concerns and interests must still be accommodated by States, modifying the original project or development based on the outcome of this process,[35] at the risk of causing non-negligible harm to Indigenous peoples' livelihood. For instance, the HRC noted in Länsmann II that the Finnish authorities consulted the Saami and took their concerns into account before granting a logging permit in their lands, amending the original project by excluding certain zones; reverting to the use of winter roads; and deciding on using manual logging methods, which have lighter effects than mechanical logging, thus avoiding serious effects on their traditional reindeer herding activities.[36] If States do not accommodate their concerns, and keeping in mind that the precautionary principle lowers the standard of proof,[37] Indigenous peoples need only demonstrate that, based on the best information available (which includes their traditional knowledge), there is 'credible evidence' that serious/irreversible harm may be caused to their traditional way of life (instead of proving 'beyond reasonable doubt'), being then the turn of the State to disprove this allegation, that is, that the project/development planned on their lands would not cause serious/irreversible harm, despite disregarding Indigenous peoples' input; this could be a difficult thing to prove, especially regarding spiritual and cultural impacts. Failure to disprove this requires then the adoption of effective precautionary actions, with Indigenous participation, as it must be assumed that these effects will materialise.[38]

[34] See also Chapter III, sections 4-5.
[35] The IACHR is of a similar opinion but based on the 'due process guarantees' established in the Inter-American system. Ancestral lands, para. 324. See also 2020 Report, para 63.
[36] HRC, Jouni E. Länsman et al. v. Finland, Communication No. 671/1995(1996), paras. 6.1, 6.13 and 10.5.
[37] See Chapter II, section 4.2.
[38] Ibid.

The second implication is that if the potential threat is more than serious, something more than consultations/impact assessments is required, to which I turn now.

2.2 Precaution and consent

As noted in chapter II, when the precautionary principle is triggered, States must adopt 'effective' and 'proportionate' action to anticipate potential harm, i.e., measures able to avoid this harm without causing more damages than the original threat, and that bear an appropriate relation between the degree of the risk and the response.[39] This means that substantive risks require more rigorous precautionary measures, following a logic of 'the higher the risk the greater the need for precaution'.

In the case of Indigenous peoples, and due to their particular livelihood, 'substantive risks/harm' refers to not only (possible) physical effects, like impacts on their right to life or personal integrity, but also to their survival as peoples, i.e., their ability to continue with their traditional way of life and the protection, preservation, respect and guarantee of the special relationship that they have with their lands; their distinct cultural identity; social structures; economic systems; and customs, beliefs and traditions.[40] For example, removing Indigenous peoples from their lands may not result in physical injuries, but it would cut their connection with their territories, making it impossible or very difficult for them to continue with their traditions and ceremonies; fulfil their material needs like obtaining food, medicine or clothes; and apply their traditional knowledge, rendering it useless and unable to be updated and passed down to the younger generations, which would severely affect their cultural identity and risking their cultural extinction.[41] As noted by the World Council of Indigenous Peoples, "[n]ext to shooting Indigenous Peoples, the surest way to kill us is to separate us from our part of the Earth. Once separated, we will either perish in

[39] Ibid., section 4.1.
[40] Saramaka interpretation, para. 37; Saramaka, paras. 91, 121 and 129.
[41] See Chapter IV section 6.3; Chapter V, section 2.2.3; IACtHR, "Chitay Nech et al. v. Guatemala (Preliminary Objections, Merits, Reparations, and Costs)", 25 May 2010, para. 147; D. Posey, "Introduction: Culture and Nature-The Inextricable Link" in D. Posey (ed), Cultural and Spiritual Values of Biodiversity (UNEP, 1999), p 5.

body or our minds and spirits will be altered so that we end up mimicking foreign ways, adopt foreign languages and build a foreign prison around our Indigenous spirits (…)".[42] Venne further highlights that "[r]emoving us from our land base is, in fact, to take away our lifeforce".[43] As previously mentioned, effects of a similar magnitude could occur from large-scale projects and developments on their lands, including destruction that could force Indigenous peoples to abandon part of their territories or rendering them unusable from traditional purposes,[44] as well as from smaller, cumulative ones.[45] The former Special Rapporteur has even noted that, given the invasive nature of extractive activities, it is 'perhaps mostly a theoretical possibility' that they cannot cause substantive effects on Indigenous peoples.[46]

It is important to mention that when it comes to projects related to the use of natural resources, States often have a vested interest;[47] this, added to the lack the proper understanding regarding impacts on Indigenous peoples' special relationship with their lands,[48] makes consultations insufficient to ensure that potentially substantive effects on their way of life will not materialise.[49] In addition, these types of projects seems to leave little space to effectively accommodate Indigenous peoples' concerns and interests; for instance, there is not much that can be done to protect sites of cultural or spiritual significance that will be underwater due to the

[42] Cited in M. Colchester-Forest peoples Programme, Dams, *Indigenous Peoples and Ethnic Minorities,*
Thematic Review 1.2 prepared as an input to the World Commission on Dams, Cape Town (2000), p 18.
[43] S. Venne, "The New Language of Assimilation", Without Prejudice Vol. II No 2(1989), p 63.
[44] ILO travaux report VI(1), p 63; Chapter IV section 6.3; Chapter V, section 2.2.3; HRC, Poma Poma v. Peru, Comm. 1457/2006.
[45] F. MacKay, "The Case of the Kaliña and Lokono Peoples v. Suriname and the UN Declaration on the
Rights of Indigenous Peoples: Convergence, Divergence and Mutual Reinforcement" ELR (April 2018) | No. 1, p 40. See also J. Reyes, "La Tierra Desde La Visión del Mundo Ayuuk" in M. Castillo and A. Strecker, *Heritage and Rights of Indigenous Peoples* (Leiden University Press 2017), pp 184-185 mentioning how the gods were angered and brought misfortune to the peoples due to the construction of various roads without celebrating rituals and asking them for permission.
[46] 2013 Report, para. 31.
[47] E. Daes, "Indigenous Peoples and Their Relationship to Land", E/CN.4/Sub.2/2001/21, 11 June 2001, para. 23
[48] See for example, Colchester (n 42), p 18, noting that "[w]hat may appear to planners as a minor impact – the submergence of ancestral graves, for example (…)- can have serious social repercussions, since the economic and religious life of many indigenous peoples is often linked to specific topography of their lands" p 18. See also Chapter III, sections 3-5.
[49] P. Thornberry, *Indigenous Peoples and Human Rights"* (Manchester University Press, 2002), p 357; F. MacKay, A Guide to Indigenous Peoples' Rights in the International Labour Organization" Forest Peoples Programme (2003), pp 16 and 18; Chapter IV section 6.3, among others.

construction of a dam in ancestral lands.[50] Considering this, and as analysed in previous chapters, on several occasions in international law the approach has been to rely on a stronger measure; for example:

- the IACtHR, to ensure that Indigenous peoples' survival as peoples is not at risk, established in Saramaka the duty to obtain Indigenous peoples' FPIC in the case of "major development or investment plans that *may* have a profound impact on the[ir] property rights"[emphasis added].[51] This includes individual and cumulative effects of current and future activities that could jeopardise Indigenous peoples' survival,[52] and it is based on a 'sliding-scale approach' that relies on "the *anticipated* degree of impact on the community" [emphasis added],[53] by which "the measures which have a potentially substantial impact on the basic physical and/or cultural well-being of an indigenous community should not proceed without their consent";[54]
- in the context of UNDRIP and possible effects of extractive activities in Indigenous lands, a majority of authors consider that, taking into account this Declaration's spirit and normative framework, FPIC is required when a measure could have substantive effects on their environment and way of life.[55] For instance, Barelli mentions that consent is required regarding measures "*likely* to produce a major (negative) impact on their lands, cultures and, ultimately, lives of Indigenous peoples"[emphasis added].[56] Furthermore, Gilbert and Doyle argue that UNDRIP establishes an obligation to obtain consent when there are measures or projects "with potentially major impacts or threatening the physical or cultural survival of a people."[57]

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[50] As it happened in Chile during the 1990s, with the construction of dams in Pehuenche territory that submerged their homes and entire forests of sacred trees (Araucarias); in addition, Pehuenche families were threatened with forced evictions. See American Anthropological Association, "Report of the Committee for Human Rights: The Pehuenche, the World Bank Group and ENDESA S.A. violations of Human Rights in the Pangue and Ralco Dam Projects on the Bío-Bío River, Chile" (March 1998). As noted during the drafting of C169, the displacement of Indigenous peoples due to these types of projects is a recurrent issue. ILO travaux report VI(1), pp 63-65.

[51] Saramaka, para. 137; see also para. 134.

[52] Saramaka interpretation, paras. 17 and 41; Chapter V, section 3.1.2.

[53] Pentassuglia (n 8), pp 178 and 180; Saramaka, para 137; M. Barelli, "Free, Prior and Informed Consent in the UNDRIP" J. Hohmann and M. Weller (eds) *The UN Declaration on the Rights of Indigenous Peoples: A Commentary* (OUP, 2018), p 258.

[54] J. Gilbert and C. Doyle, "A New Dawn over the Land: Shedding Light on Collective Ownership and Consent" in S. Allen and A. Xanthaki (eds), *Reflections on the UN Declaration on the Rights of Indigenous peoples* (Hart publishing, 2011), p 308.

[55] Chapter V section 2.2.3.2.

[56] Barelli (n 53), p 269.

[57] Gilbert and Doyle, (n 54), p 318.

- the EMRIP noted that "if a measure or project is likely to have a significant, direct impact on indigenous peoples' lives or land, territories or resources then consent is required",[58] and approach shared by the Special Rapporteur,[59] who adds that "consent may not be required for extractive activities within indigenous territories in cases in which it can be *conclusively established* that the activities will not substantially affect indigenous peoples in the exercise of any of their substantive rights in relation to the lands and resources within their territories" [emphasis added],[60] which also includes their relationship with their lands and its manifestations.
- the Akwe:Kon Voluntary Guidelines establish that the prior and informed consent should be obtained when a proposed development is likely to impact sacred sites or lands and waters traditionally occupied or used by Indigenous peoples,[61] which have a particular importance for their cultural and spiritual significance,[62] so any effects on them could threaten their cultural survival.
- Finally, both C169 and UNDRIP require FPIC in the context of relocations[63] (which potentially substantive effects were mentioned above), and the latter also requires consent in the case of the storage or disposal of hazardous materials in Indigenous lands,[64] that could cause long-terms health impacts on current and future generations, and the extreme pollution of the local water, soil, flora and fauna, affecting Indigenous peoples' capacity to maintain their traditional way of life and practices.[65]

In this sense, obtaining Indigenous peoples' consent constitutes "a heightened safeguard for the rights of indigenous peoples", following a logic of proportionality

[58] EMRIP 2018 Report, para 35. See also para. 26(a), noting that "withholding consent is expected to convince the other party not to take the risk of proceeding with the proposal".
[59] See 2009 Report, para. 47, 2020 Report, para. 60; Leydet (n 10), p 399; Gilbert and Doyle, (n 54), p 308.
[60] 2013 Report, para. 31.
[61] Akwe:Kon, paras. 52-53. See also S. Rombouts, *Having a Say Indigenous peoples, international law and free, prior and informed consent* (Wolf Legal Publishers, 2014), p 330 and Chapter III, section 6.
[62] Akwe:Kon, para. 6(e).
[63] C169, Article 16; UNDRIP, Article 10.
[64] UNDRIP, Article 29.2.
[65] Chapter V section 2.2.3.

in regard to their rights,[66] by which a State should not move forward with a proposed measure until this consent is obtained.[67]

Despite this, as noted in previous chapters, concerns about control over natural resources and issues of participation and self-determination have resulted in a limited recognition and application of the need to obtain FPIC. For instance, the IACtHR after Saramaka has focused more on the 'consultation aspect' of participation, even in the face of substantive effects that threatened Indigenous peoples' cultural survival, which MacKay considers constitutes "a trend of minimising or omitting any discussion of the consent requirement", that protects States' ability to have the final say regarding natural resources.[68] The characterization of UNDRIP by (mostly Indigenous) academics as an instrument that perpetuates a colonial approach to Indigenous peoples also implies that States remain the 'final determiner' and 'retain the power to decide' when it comes to Indigenous issues, even if there is a substantive threat of harm.[69] Moreover, this decision-making power has been exercised by States (and it has been seemingly supported by regional Courts, as previously noted), viewing FPIC as a mechanism to include Indigenous concerns in decision-making but without sharing any 'decision-making authority', privileging "a more diluted version of FPIC as a participatory right, which results in a procedural obligation to seek consent through what is often technical (and symbolic) consultation".[70] Finally, C169 is silent about potentially substantive threats of harm from extractive activities on their territories, and establishes a weak version of FPIC in situations of relocation, that leaves the final decision to States, prioritising their concerns about self-determination, and economic reasons.[71]

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[66] Ancestral lands, para. 333; 2013 Report, para. 33, noting that "consent performs a safeguard role for indigenous peoples' fundamental rights"; see also EMRIP Report 2018, para. 35.

[67] EMRIP Report 2018, paras. 22 (a)-(b) and 26-28, noting that withholding consent is expected to convince the counterpart not to move forward with a measure and that Indigenous peoples may use this to look for adjustments or amendments to a proposal; 2009 Report, para. 47. See also Barelli (n 53), p 254.

[68] MacKay (n 45); Chapter V, section 3.1.3.

[69] Chapter V, section 2.2.3.2.

[70] M. Papillon and T. Rodon, "The Transformative Potential of Indigenous-Driven Approaches to Implementing Free, Prior and Informed Consent: Lessons from Two Canadian Cases", International journal on Minority and Group Rights 27 (2019), p 6, as also noted in the various jurisprudence throughout this work. See also Chapter V, section 2.2.3.2.

[71] Chapter IV, section 6.3; see also ILO travaux report VI(1), p 65, expressly mentioning that the 'ultimate decision' will remain with governments.

Considering the fact that consultations/impact assessments act as precautionary measures, as well as the 'proportionality' requirement, by which stricter measures are needed in the face of higher threats of harm, in situations of 'major development or investment plans that may have a profound impact' on Indigenous peoples' way of life; and/or where there are measures that could 'have a potentially substantial impact on the basic physical and/or cultural well-being of an indigenous community', 'substantially affect indigenous peoples in the exercise of any of their substantive rights in relation to the lands and resources within their territories', or are 'likely to produce a major (negative) impact on their lands, cultures and, ultimately, lives of Indigenous peoples', there is an obligation for States to obtain Indigenous peoples' FPIC. This obligation is independent from arguments about control over territories and resources, or power dynamics on the decision-making process, as it originates in the precautionary duty to avoid the materialisation of possible substantive impacts on their traditional way of life, especially their cultural and spiritual aspects, which entails subordinating other considerations to this duty.[72]

In other words, FPIC does not only constitute a 'heightened safeguard', but a heightened *precautionary* safeguard, which has to be obtained in any situation where there is credible evidence of substantive risks to their traditional way of life or their survival as peoples. This provides a more balanced and consistent standard, applicable regardless of controversies about control over natural resources, self-determination or participatory issues. It also ensures that traditional knowledge ('the best information available') is actually considered in the decision; that only the risks Indigenous peoples deem acceptable may occur, especially in regards to spiritual and cultural aspects; that they maintain the ability to determine what constitutes a 'substantive risk/harm' and when FPIC is needed;[73] and that their fundamentals rights are not infringed,[74] which in turn strengthens the protection of Indigenous peoples' special relationship with their lands. For instance, in 2010 the Warlmanpa People of Muckaty initiated court proceedings against the Australian government's

[72] See Chapter II section 4.3.
[73] Gilbert and Doyle (n 54), p 319. see also J. Parra, 'The Role of Domestic Courts in International Human Rights Law: The Constitutional Court of Colombia and Free, Prior and Informed Consent', International Journal on Minority and Group Rights 23(2016), pp 365-366.
[74] 2013 Report, para. 33; Saramaka, para. 137.

attempt to establish a nuclear waste dump site in their territories, claiming among other things that they failed to obtain the consent of the Traditional Owners,[75] who consider these lands of special significance as it was handed down to them by their ancestors (and form part of stories about their dreaming), together with the knowledge to look after them, a knowledge that need to be passed to future generations.[76] In 2014, this conflict concluded in an arrangement by which the government agreed not to build the site in their lands.[77] Another example is the collaboration between the Saami and the Finnish government in the creation of a management plan for the Hammastunturi Wilderness Area, that protect the Saami traditional way of life and preserve their culture from the possible threats represented by other competing land use forms, such as extractive industries and development initiatives, and leaving the management and maintenance of sacred sites in the hands of the Saami.[78]

In addition, this also influences the way in which States can act in the absence of Indigenous peoples' consent, to which I turn now.

2.3 Precaution and circumventing Indigenous peoples' FPIC

As noted by the IACtHR, Indigenous peoples' rights can be subject to limitations, which have to be necessary and proportional, established by law and with the objective of achieving a legitimate purpose, in accordance with human rights obligations.[79] This also applies to the fundamental rights protected by FPIC. In effect, according to the former Special Rapporteur, States can move forward with a measure without obtaining FPIC if they are able to demonstrate that no rights are

[75] Watson (n 5), p 107.
[76] See Beyond Nuclear initiative, Press release, June 19, 2014 https://www.foe.org.au/muckaty-winnerz [accessed January 2021].
[77] A. Newman and G. Nagtzaam, *Decision-making and Radioactive Waste Disposal* (Routledge, 2016), pp 164-165. See also Papillon and Rodon (n 70), pp 19-20, recounting the Cree's opposition to an uranium mining project in their ancestral lands, refusing to engage in negotiations with the mining company; this led a moratorium on uranium mining issued by the government of Quebec, based on among other reasons the lack of consent from the Cree and the protection of Aboriginal peoples, including their societies, communities and economy.
[78] S. Juntunen and E. Stolt, *Application of Akwe:Kon Guidelines in the Management and Land Use Plan for the Hammastunturi Wilderness Area: Final Report* (Metsähallitus Natural Heritage Services 2013), pp 9, 33-35 and 53. See also section 2.3 c) below.
[79] Saramaka, para. 127; 2013 Report, para. 32; UNDRIP, Article 46.2, among others.

being limited or, if they are, the limitation is valid under international law (so, for example, the right to be free from torture cannot be limited);[80] and that this limitation is necessary and proportional and in pursuit of a valid purpose or objective 'motivated by concern for the human rights of others', excluding commercial or revenue-raising objectives.[81] In addition, other safeguards must be implemented to minimise the limitations of rights (like compensations) and the decision should be subject to judicial review.[82] It is also important to recall that C169 also allows for States to overcome the lack of consent, but under more favourable conditions for them, i.e., following 'appropriate procedures established by national law and regulations' and, 'whenever possible' enabling Indigenous peoples' return to their lands or, if this is not possible, compensate them with lands of at least equal quality and legal status or money.[83]

In general, and considering the degree of the impacts caused by extractive projects and other developments in Indigenous lands, it seems difficult that States are able to meet these requirements.[84] Even if they do, States' duty to adopt effective and proportionate action to avoid these non-negligible impacts on Indigenous peoples' livelihood persists, so they must ensure that the substantive harm would not occur, at the risk of failing to comply with the precautionary principle. In theory, this implies that, as long as States adopt measures that effectively stop the occurrence of substantive harm, they could circumvent the lack of Indigenous peoples FPIC, in line with the notion that FPIC does not constitute a veto power.[85] However, considering the difficulties to assess (much less properly understand) the possible effects on Indigenous peoples' traditional way of life in these situations, in particular those of a cultural/spiritual nature, short of cancelling or suspending a project that would have caused the impacts, it seems very unlikely that other measures would achieve this result, making it necessary to obtain their consent. In this context, it is also important

[80] 2013 Report, paras. 33-34; EMRIP Report 2018, para. 38. See also J. Anaya and S. Puig, "Mitigating State Sovereignty: The Duty to Consult with Indigenous Peoples" Arizona Legal Studies Discussion Paper No.16-42, p 27.
[81] 2013 Report, paras. 34-36, and EMRIP Report 2018, para. 38. It is useful to recall that economic considerations also take a back seat when the precautionary principle is triggered. Chapter II section 4.3.
[82] 2013 Report, paras. 38-39; Anaya and Puig (n 80), p 27; EMRIP Report 2018, para. 38-41.
[83] C169, Article 16.2-16.4.
[84] Barelli (n 53), p 269. See also Anaya and Puig (n 80), p 27; EMRIP Report 2018, para. 38; 2013 Report, para 36.
[85] 2009 Report, paras. 46-48; EMRIP Report 2018, para. 26 (a); 2020 Report, para 59, among others.

to note that Indigenous peoples need only to prove the existence of 'reasonable grounds for concern' about potentially substantive threat to their traditional way of life, following a precautionary standard of proof.

That being said, States could argue that the need to consult Indigenous peoples or their lack of acquiescence may interfere with the (precautionary) protection of other values that are important for the society, or even Indigenous peoples themselves. Although this is difficult to assess *in abstracto,* I will explore this issue looking at three situations: when a rapid response is required to avoid harm; in situations of conservation and the establishment of parks and reserves affecting Indigenous peoples' territories; and in the context of measures to combat climate change.

a) Rapid responses: emergencies and natural disasters

As previously noted, Indigenous peoples must be consulted (and obtain FPIC if required) whenever there is a measure that could affect them directly. This is a lengthy process [86] with several steps, which although adequate to analyse and integrate different perspectives, possible risks and integrate traditional knowledge, it seems unsuitable for situations where a rapid response is required, including when there are potentially serious or irreversible risks of harm. Trouwborst for instance, in illustrating what to do in a situation where there is no scientific information available, draws the example of a ship loaded with chemical substances that was damaged in a storm and its content is leaking into the ocean, without information about the possible effects of these chemicals in the water.[87] If this is happening right before an area where a coastal Indigenous community lives, there would be little time to prepare consultations with their representative institutions (e.g., gather a Council of Elders) or to conduct impact assessments, so precautionary measures without Indigenous consent or even consultations can be adopted, including perhaps temporary relocations; failure to do so could result in serious or substantive effects

[86] See Rombouts (n 61), p 416 expressing that an "obvious drawback of the FPIC system discussed is that it will undoubtedly require a lot of time and resources to conduct the necessary consultation processes,
impact assessment, and mapping operations."
[87] A. Trouwborst, *Precautionary Rights and Duties of States* (Martinus Nijhoff, 2006), p 144.

on their way of life. Similarly, this would apply to natural disasters, like tsunamis, especially considering that they can be caused by the displacement of a large volume of water that is not necessarily detected on land, like an underwater earthquake.[88] Naturally, when the emergency stops, consultations must be conducted about the next steps, and consent obtained if for example relocation has to be permanent or there are other substantive effects. The ILO Tripartite Committee has expressed a similar approach, agreeing with the position of the Chilean government that Indigenous consultations could not be required during states of emergency or exception because "prior consultations cannot be held in situations where decisions must be taken quickly and effectively (…) and where it would be impossible to follow the steps set out in the Regulations on Consultation with Indigenous Peoples", noting that "while certain circumstances, such as natural disasters, may require the taking of urgent and emergency measures, consultation procedures should be re-established as soon as possible."[89] When it comes to UNDRIP this is less clear, because it does not establish any way to bypass Indigenous consent (unlike C169 in relocation);[90] furthermore, regarding relocations, there is a 'blanket prohibition'[91] established in Article 10 ("Indigenous peoples shall not be forcibly removed from their lands of territories") as it was noted by States during the drafting procedure, which raised concerns that the use of the word 'forcibly' would not allow them to relocate Indigenous peoples in the case of natural disasters or emergency situations.[92] Yet, the International Law Association noted that the "lack of express exceptions in Article 10 may not, however, prevent removals or relocations in cases of necessity or *force majeure*" like war and catastrophe,[93] which I believe is the correct view.

[88] Pacific tsunami warning center frequently asked questions https://ptwc.weather.gov/ptwc/faq.php [accessed July 2019].
[89] Report of the Tripartite Committee submitted following a Representation under article 24 of the ILO Constitution regarding ILO C169 Chile 2016, paras. 84, and 136-137.
[90] Barelli (n 53), p 255.
[91] C. Charters, "Indigenous peoples' Rights to lands, Territories and Resources in UNDRIP" in Hohmann and Weller (n 53), p 409, noting that Article 10 "suggest a deliberate intention to retain a strong, blanket prohibition."
[92] Economic and Social Council, "Report of the working group established in accordance with Commission on Human Rights resolution 1995/32" E/CN.4/2002/98 6 March 2002, para. 79; see also Charters (n 91), p 409 and Barelli (n 53), p 255.
[93] See ILA, "Rights of Indigenous Peoples Interim Report" 2010, p 21. See also Barelli (n 53), p 255 pointing out that the Declaration, compared to C169, sought to "limit the scope of the permitted exceptions" to relocation, implying that there are exceptions.

In other words, in situations of emergency or natural disasters where potentially serious, irreversible or substantive harm could occur, States can proceed without Indigenous consent, being this a necessary and proportionate course of action adopted for a valid purpose; otherwise, there may not be Indigenous peoples to consult if the precautionary action is delayed. However, after the urgent measure is put in place, States are still under the obligation to consult and obtain consent, if required.

b) Conservation efforts and the creation of parks and reserves

It is not uncommon for States to argue that Indigenous peoples' must be/had to be relocated against their consent, notwithstanding the potentially catastrophic effects on their traditional way of life, in order to protect the 'wilderness' from current and potentially serious impacts, based on a conservation perspective of 'minimum human interference' that excludes Indigenous peoples and any people living in a particular area.[94] For instance, as analysed in the previous chapter, Kenya ordered the eviction of the Ogieks from their ancestral home in the Mau Forest without consultations, threatening their very survival as peoples, to allegedly preserve the natural ecosystem from activities like hunting and fishing and their possible negative impacts on the environment;[95] and the Endorois were removed from their ancestral lands without consultations to establish a Game Reserve, leaving them unable to continue using their natural resources and sacred sites, seriously disrupting their traditional way of life (including spiritual practices), and threatening their survival as peoples.[96] Similarly, Tanzania evicted the Maasai without consultation from their villages arguing environmental concerns about their practices (agriculture, tree cutting and hunting) in the Loliondo Game Control Area, burning their homes and crops and

[94] Originated from the world's first national park, Yellowstone, in the United States. E. Desmet, *Indigenous Rights Entwined with Nature Conservation* (Intersentia, 2011), pp 14-15, and 101-102; and E. Bernbaum, "Mountains: the Heights of Biodiversity" in Posey (n 41), p 342. See also Chapter III, section 3.

[95] African Court on Human and Peoples' Rights, "African Commission on Human and Peoples' Rights v. Republic of Kenya", Application No 006/2012, Judgment, 26 May 2017 ('Ogiek'), paras. 7-8, 130 and 174.

[96] African Commission on Human and Peoples' Rights ('ACHR'), "Case 276/03: Centre for Minority Rights Development (Kenya) and Minority Rights Group (on behalf of Endorois Welfare Council)/Kenya" ('Endorois'), paras. 6-7, 16 and 120.

leaving them homeless and without food;[97] and Uganda expelled the Batwa from their traditional forest lands without consultations to, among other things, create the Bwindi and Mgahinga National Parks, substantially changing their way of life from hunter-gatherers to working in farms, suffering abuses and discrimination and being unable to access their sacred sites or traditional medicines.[98]

It is clear in these cases there was no agreement for the relocations and States acted against their will, despite the substantive effects on their traditional way of life. This could be in theory presented as a clash between the need to avoid possible serious or irreversible harm to the environment (conservation) and the avoidance of serious or substantive harm to Indigenous peoples; however, this tension seems to be in most cases more apparent than real, for two reasons:

- first, the argument that forced relocations were conducted to protect the environment and even to uphold a responsibility towards the society at large and future generations[99] is often contradicted by States' actions. For instance, Kenya granted logging concessions in the Mau Forest,[100] "raising doubts about the legitimacy of the environmental justification for the resettlement of the Ogiek";[101] similarly, it granted concessions for mining in the ancestral lands of the Endorois, which could cause irreparable damage to the land;[102] and Tanzania has favoured the business of private enterprises in Maasai lands, including the construction of housing and an airport in the middle of wildlife corridors, causing noise and pollution and disturbing the wildlife.[103] These economic reasons do not constitute a "valid purpose or objective" to override Indigenous peoples' consent, as noted above. The only case in which there seemed to be real conservation efforts without an economic 'hidden'

[97] J. Anaya, "Report by the Special Rapporteur on the situation of human rights and fundamental freedoms of indigenous people: Cases examined by the Special Rapporteur (June 2009–July 2010)" 15 September 2010, A/HRC/15/37/Add.1 ('2010 Report on examined cases'), para. 424 (c), (d), (h), (i) and (j).
[98] N. Mukasa, "The Batwa Indigenous People in Uganda and their Detachment from Forest Livehood: Land Eviction and Social Plight", Deusto Journal of Human Rights No 10/2012, pp 77 and 80. See also A. Namara, "From Paternalism to Real Partnership with Local Communities? Experiences from Bwindi Impenetrable National Park (Uganda)", Africa development, Vol XXXI No 2 (2006), p 60.
[99] See for instance Ogiek, para. 174 and Endorois, para. 178, arguing that the establishment of a Game reserve is to ensure management and conservation of wildlife to benefit the nation in general.
[100] Ogiek, paras. 130-131.
[101] 2010 Report on examined cases, para. 259, implying that this interest was not genuine as during the evictions Kenya was granting logging concessions.
[102] Endorois, paras. 117 and 210.
[103] 2010 Report on examined cases, para. 424 (j) and (q).

motive was in the case of Uganda; however, the effects on the Batwa were so devastating that in my view they clearly surpass any possible effects from their practices on the environment (which in any case did not really posed an environmental threat, as I will mention below), failing to comply with the proportionality requirement, as they caused more negative effects that the ones attempted to avoid,[104] devastating their life as peoples. In this context, Anaya notes that "because the relocation of indigenous peoples who have strong cultural and material connections to the lands from which they are removed is understood to implicate threats to a range of human rights, the establishment of environmental conservation areas should not result in the relocation of indigenous peoples."[105]

- Second, in the majority of situations Indigenous peoples were not causing environmental harm, and they were actually contributing to nature conservation; for example, the African Court noted that Kenya was unable to prove that the Ogiek's presence in the area caused environmental harm, being the actual causes the encroachment by other groups and logging concessions,[106] also noting that "each [Ogiek] clan ensures the maintenance of the environment"; [107] the African Commission explicitly mentioned that the Endorois "as the ancestral guardians of the land are best equipped to maintain its delicate ecosystems" and could continue the conservation work started by the government;[108] the Special Rapporteur remarks that there was no evidence that the Maasai posed an environmental threat to their lands but that their traditional pastoralist lifestyle "preserves the environment and does not cause harm to the regions wildlife;"[109] and it has been stated that before their eviction the Batwa had a low-impact and sustainable use of forest resources.[110]

As noted in previous chapters, these Indigenous attitudes towards their environment are common among them, with Indigenous peoples and their traditional knowledge having an important role in contributing to identify possible risks, address

[104] In this context, Mukasa mentions that "Studies have categorically stated that radical creation of protected areas – including forest resource was not an effective conservation policy." Mukasa (n 98), p 77.
[105] 2010 Report on examined cases, para. 260.
[106] Ogiek, para. 130.
[107] Ibid., para. 183. See also 2010 Report on examined cases, para. 259.
[108] Endorois, para. 235.
[109] 2010 Report on examined cases, para. 424 (i).
[110] J. Lewis, "The Batwa Pygmies of the Great Lakes Region" Minority Rights Group International (2000), p 3.

uncertainties and adopt effective precautionary action, as they depend on their environment for their survival.[111] This is also highlighted in several instances in international law, like in the Rio Declaration on Environment and Development,[112] the Convention on Biological Diversity and Akwe;Kon Guidelines, [113] the IACtHR;[114] and the Special Rapporteur,[115] among others. Further corroboration can be found in the documented environmental impacts that follow the absence of Indigenous peoples, like soil degradation and reduction of wildlife.[116] What this all means, in my view, is that the tensions between the PP and Indigenous lack of FPIC here are more apparent than real, because forcefully relocating Indigenous peoples would not avoid the materialisation of serious or irreversible harm to their environment. On the contrary, it would be detrimental for their territories, which also means that the requirement of being a 'necessary measure to comply with a valid purpose' to circumvent FPIC is not met, also considering that often there is no valid purpose, because of economic interests behind seizing Indigenous lands. Even if it this was not the case, in general Indigenous relocations cause such devastating effects on Indigenous peoples' way of life, including their special connection with their lands and territories and its manifestations, that they cannot be considered a 'proportionate measure' to avoid other types of harm.

In sum, States would not have the legal justification to move forwards with a measure of this kind without FPIC, and doing so would constitute a failure to comply with their precautionary duties.

[111] See Chapter III, sections 3-4.
[112] 1992 Rio Declaration on Environment and Development, UN Doc. A/CONF.151/26 (vol. I)/31ILM 874(1992), Principle 22 "Indigenous people (…) have a vital role in environmental management and development because of their knowledge and traditional practices"
[113] See Chapter III section 6.
[114] See IACtHR, "Case of the Kaliña and Lokono Peoples v. Suriname (Merits, Reparations and Costs)", Judgment of November 25, 2015, para. 173, noting that Indigenous peoples "may play an important role in nature conservation, since certain traditional uses entail sustainable practices and are considered essential for the effectiveness of conservation strategies."
[115] V. Tauli-Corpuz, "Report of the Special Rapporteur on the rights of indigenous peoples", 1 November 2017, A/HRC/36/46 ('2017 Report'), para. 7.
[116] See Chapter III, sections 3-5.

c) Mitigating climate change impacts

Climate change is a problem where there is a huge amount of uncertainty and where the precautionary principle plays an important role.[117] The Intergovernmental Panel on Climate Change ('IPCC') is currently working on the 6th Assessment Cycle to produce a report due for release in 2022, but previous reports show estimates about the increase in global temperature of 2 degrees Celsius (likely) and more than 2 degrees Celsius (more likely than not) although temperature raises of up to 4 degrees have been projected as well.[118] In this context, there is indeed a need for States to implement measures to at least avoid the worst case scenarios, adopting all the measures possible to mitigate the effects of climate change.

Indigenous peoples are among the ones more vulnerable to climate change because of the dependence on their ecosystems, so the fact that more extreme events (e.g., floods, heatwaves, cyclones) will occur more frequently impacts them more directly, as there are more risks of diseases, reduction of biodiversity and food insecurity, among others.[119] These, however, are not the only risks that they face related to climate change; there is also the issue of projects that are promoted as a measure to mitigate climate change but that could substantively affect their traditional way of life, with effects that may range from relocation to impacts on certain sites of cultural or religious significance.[120] Thus, there could be tensions between State's projects genuine directed to address climate change (i.e., not having economic motivations)[121] and the potentially substantive effects of those same projects in Indigenous peoples' traditional way of life, a situation where their FPIC

[117] UN Framework Convention on Climate Change,1771 UNTS 107; UN Doc. A/AC.237/18(Part II)/Add.1; 31 ILM 849 (1992), Article 3.3.
[118] M. Collins, R. Knutti, J. Arblaster, J.-L. Dufresne, T. Fichefet, P. Friedlingstein, X. Gao, W.J. Gutowski, T. Johns, G. Krinner, M. Shongwe, C. Tebaldi, A.J. Weaver and M. Wehner, "Long-term Climate Change: Projections, Commitments and Irreversibility" in Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the IPCC (CUP 2013).
[119] 2017 Report, paras. 6-7.
[120] Ibid., para. 12.
[121] Although the limits are often blurred; for example, El Diquis hydroelectrical project in Costa Rica (that would have affected Indigenous peoples' territories) was first planned as a strategic development project but later focused on energy commercialisation to neighbours and as a mean to achieve carbon neutrality in line with the Paris Agreement. M. Mora, "Sacrifices for Development or Thirst for Capital Accumulation? Case Study on the "El Diquís Hydroelectric Dam" in Costa Rica" (2019). International Development, Community and Environment (IDCE), pp 34-39.

would be required. Having in mind that this is very difficult to address this *in abstracto,* in my view generally any project that has as a consequence the relocation of Indigenous peoples cannot proceed without their consent. In effect, even though it could be argued that there is a 'valid purpose or objective' and the limitation may be 'necessary', the severe effects on Indigenous peoples' lives fail to comply with both the 'proportionality' requirement and the duty to avoid substantive harm, as noted above. In addition, it is often the case that hydroelectrical projects, which are usually the ones that involve Indigenous' relocations[122] are not completely 'climate-change friendly', in some cases emitting as much greenhouse gases per kilowatt/hour as thermal power plants and destroying forests that act as carbon sinks,[123] in which case they do not constitute 'a necessary limitation' in pursue of a valid purpose. Finally, it is necessary to consider that among the potential consequences of relocations are the loss of important traditional knowledge and techniques that could be useful to mitigate climate change effects, as noted by the IPCC, such as the Inca's practices of crop diversification, agroforestry and water harvesting, among others.[124]

When it comes to other types of impacts that could contribute to avoid the worst effects of climate change, opposed by Indigenous peoples' due to the potentially substantive impacts on their way of life, this requires a case-by-case analysis. This is because being this an area in constant development, it is virtually impossible to foresee and anticipate all the potential ramifications on Indigenous peoples' livelihood, especially those of a spiritual nature. For example, the IPCC remarks that according to the best estimates, we are not in the path to ensure that the temperature rise would be limited to 1.5 degrees Celsius or less, which can only be achieved if CO2 emissions start to decline well before 2030;[125] this means that renewable energy projects planned to enter the power grid after that date may contribute much less to mitigate climate change effects. Conversely, the development

[122] 2017 Report, paras. 50 and 109-117. See also *supra* 50.
[123] M Pearson, D. Aronofsky and E. Royer, "Chile's Environmental Laws and the Hidroaysen Northern Patagonia Dams Megaproject: How is this Project Sustainable Development?" 41 Denv. J. Int'l L. & Pol'y 515 (2013), p 552.
[124] IPCC, "Climate Change 2014: Impacts, Adaptation, and Vulnerability, Part A: Global and Sectoral Aspects, Working Group II Contribution to the Fifth Assessment Report of the IPCC" (CUP, 2014), p 517.
[125] V. Masson-Delmotte, P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.), "Special Report: Global Warming of 1.5°C: Summary for Policymakers" (IPCC 2018), p 18.

of technologies able to sequester all the emissions from a sacred volcano, affecting Indigenous peoples' spiritual and cultural practices, could significantly contribute to limit global warming's effects. Both degrees of contributions must be taken into account when weighing the 'necessity and proportionate' requirements in evaluating circumventing Indigenous consent, also keeping in mind that the State still has a precautionary duty to avoid the materialisation of substantive harm in moving forward with the measure opposed by Indigenous peoples.

Finally, these tensions do not need to be a zero-sum game (actually the whole process is oriented to the exact opposite), especially having in mind that withholding consent does not constitute a 'veto power', as noted above.[126] For instance, in Chile, the authorization for a wind park project (Parque Eolico Chiloe, part of a plan to rely on non-conventional renewable energy sources)[127] was revoked by the Supreme Court because Indigenous peoples in the area were not consulted and an ESIA was not conducted, in violation of C169.[128] This Indigenous opposition was partly based on the existence of several culturally significant sites, threatened by the project,[129] so after a consultation process by which the number of generators was reduced, new noise standards were adopted and the intervened area was reconsidered and made smaller, Indigenous peoples gave their consent.[130]

In sum, in situations where there is a need for a rapid response, like emergencies or natural disasters, it is possible to adopt precautionary measures (including relocations) without Indigenous peoples' FPIC, provided that after the situation is stabilised, consultations take place (and consent obtained, depending on the circumstances). Aside from this, due to their devastating effects on Indigenous peoples' way of life, measures that entail their relocation would not satisfy the criteria to circumvent consent, failing as well to comply with a precautionary

[126] See *supra* 85.
[127] See Gobierno de Chile, "Contribución Nacional Tentativa de Chile (INDC) para el Acuerdo Climático París 2015" Septiembre 2015 https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Chile/1/Chile%20INDC%20FINAL.pdf [accessed December 2020].
[128] Corte Suprema de Chile, Rol número 10090-2011, 22 March 2012.
[129] Ibid.
[130] Universidad de Los Lagos, Conflictos de Energía en Chile 2004-2014, Parque Eólico Chiloé http://proyectoconflictos.ulagos.cl/wp-content/uploads/2016/07/Parque-E%C3%B3lico-Chilo%C3%A9.pdf [accessed December 2020].

approach. Finally, other types of measures need to be analysed on a case by case basis; for example, those adopted for conservation purposes require the consideration of Indigenous peoples' important contribution in environmental and biodiversity; and measures to mitigate the effects of climate change, the evolution of what is 'necessary' or 'proportional', depending on technological advances and how the fight against climate change progresses.

4. Concluding remarks

It is often difficult to properly understand possible effects that measures taking place on their lands may have on Indigenous peoples' way of life, considering their particular relationship with their territories which involve cultural, social, spiritual and environmental aspects. In this context, even activities that could be considered 'minor' from an outsider's perspective could have devastating consequences, such as offending the spirits and bringing misfortune and disease, or desecrating places of particular significance. Following this, a wider precautionary approach that relies on traditional knowledge as a source of scientific information, incorporated in decision-making through impact studies and consultations, plays a central part in identifying and addressing possibly serious risks to their livelihood, cosmovision and identity. This provides the best information available about uncertainties and potential threats on vital Indigenous values and its manifestations, like sacred sites, cultural/spiritual activities, and traditional practices, among others, so as to adopt effective precautionary measures.

Aligned with this, it is important to highlight that the duty to conduct consultations/impact assessments is triggered when there is credible evidence that a measure 'may' affect Indigenous peoples; moreover, its rationale is to 'carefully assess' potential risks, and allow Indigenous peoples to 'fully understand' and 'be aware of' possible adverse impacts on their traditional livelihood and environment, reflecting the three elements of the precautionary principle, thus acting as precautionary measures. This in turn has two important implications: first, considering how determined effects that Indigenous peoples suffer are 'not felt by others in a society' and are difficult to understand and assess (especially those of a

cultural/spiritual nature), their concerns and knowledge must be accommodated by States (e.g., by modifying the original proposal). Failing to do so may cause serious/irreversible harm to their traditional way of life, which would breach their obligations under the precautionary principle. Second, and following a logic of 'the higher the risk the greater the need for precaution', when the threats are of a 'substantive' nature, Indigenous peoples' FPIC needs to be obtained, independent from considerations about self-determination or control over natural resources and lands (which have mired the implementation of consultations and the duty to obtain FPIC), ensuring that their traditional knowledge, concern and interest are actually taken into account in the decision. These issues do not contribute to the avoidance of harm and, considering that when the precautionary principle is triggered, stopping the materialisation of non-negligible impacts trumps all other considerations, their importance subside.

In other words, if there are reasonable grounds for concern that a substantive threat to Indigenous peoples' traditional way of life exists, FPIC needs to be obtained. This constitutes then a heightened precautionary safeguard, that ensures only the risks that they deem acceptable could materialise, strengthening the protection of Indigenous peoples' special relationship with their lands and environment, especially the spiritual and cultural aspects. Moreover, if Indigenous peoples consider that States are not complying with these duties, they only have to demonstrate that, based on the best information available (which includes their traditional knowledge), there is 'credible evidence' that serious/irreversible harm may be caused to their traditional way of life, following another effect of the precautionary principle, the lowering of the standard of proof.

As Indigenous peoples' rights are not absolute, States may be able to move forward with a certain measure, despite the lack of FPIC, under certain stringent requirements. Yet, under the precautionary principle, States are still obliged to avoid substantive impacts on Indigenous peoples' way of life, making it more difficult to proceed without obtaining Indigenous peoples' consent, especially regarding possible effects of a cultural/spiritual nature.

Finally, there may be situations where the need to obtain FPIC may interfere with other precautionary measures, protecting values that are important for society,

or Indigenous peoples themselves. Albeit it is difficult to assess this *in abstracto*, it is possible to conclude from the analysis above that situations where a rapid response is required (e.g., natural disasters), States can proceed without conducting consultations or obtaining Indigenous FPIC, provided that, after the situation is stabilised, consultations are implemented, and consent is obtained. Aside from this circumstance, in general any measure that requires the relocation of Indigenous peoples would not be 'proportional' and would also fail to avoid devastating effects on their traditional way of life. This also includes conservation measures such as the creation of national parks in Indigenous territories, which also tend to disregard the important role of environmental management carried out for centuries by Indigenous peoples. Finally, other types of measures, including those that are adopted as part of climate change mitigation efforts, would require a case by case approach, as there are too many variables and uncertainties regarding the actual benefits and possible impacts to take into account (including the loss of traditional knowledge that could contribute to mitigate climate change), which may affect the understanding of 'necessary' and 'proportional' at the time of the proposal.

In sum, the implementation of a 'wider' precautionary principle, relying on traditional knowledge as a scientific basis for the adoption of precautionary action, strengthens the protection of Indigenous peoples' way of life, ensuring that their knowledge, interests and concerns are actually taken into account in the decision-making process, and that only the risks that they consider are acceptable may occur.

Chapter VII: Conclusions

It is clear that the protection of Indigenous peoples' rights in international law has greatly advanced in the last decades. This is illustrated by the adoption of instruments such as the International Labour Organization Convention concerning Indigenous and Tribal Peoples in Independent Countries C169 ('C169') and the UN Declaration on the Rights of Indigenous Peoples ('UNDRIP'), as well as the reinterpretation of human right treaties at both the UN and regional levels, enabling monitoring bodies and Courts to address claims about violations of their rights. An important aspect of this protection is represented by Indigenous peoples' participation in decision-making, achieved mainly through the broadly recognised duty for States to consult them, with the objective to obtain their free, prior and informed consent ('FPIC') or reach an agreement, a duty that also includes conducting impact assessments to assess possible spiritual, cultural, economic and environmental impacts. This was established with the aim to correct historical injustices and a pattern of exclusion, by which consequential decisions were imposed on Indigenous peoples, [1] guaranteeing their "free, effective and permanent participation" in decision-making processes that affects their traditional way of life.[2]

While this duty must be conducted following a series of procedural requirements that would allow for a good faith dialogue and the possibility to exercise some influence over the decision-making process, there has been some criticism from Indigenous peoples, mainly due to the establishment of FPIC as an objective instead of a requirement (except in specific situations). This was based on States' concerns about granting Indigenous peoples a 'veto power' or a power equivalent to theirs, and provides a way to maintain existing power imbalances between States and Indigenous peoples, failing to fully recognise their right to self-determination, or ensure the control over their territories and resources. This was even acknowledged during the *travaux preparatoires* of C169, pointing out that the absence of consent could result in situations where "no real account was taken of the

[1] J. Anaya, "Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous Peoples" 15 July 2009, A/HRC/12/34 (15 July 2009) ('2009 Report'), para. 41.

[2] ILO Committee of Experts on the Application of Conventions and Recommendation, General Observation on Convention No. 169, publication 2019, p 4.

views expressed and of the true needs of the people being affected" (although this was still considered an improvement compared to existing law).[3] In the view of Indigenous authors, this also means that the final determination about projects and developments that may affect them and their territories remains in the hand of States, without requiring them to implement Indigenous peoples' positions, views or concerns.[4]

In practice, States tend to approach this duty to consult more as a simple procedural obligation, that does not require them to share any 'decision-making authority'.[5] Moreover, States often fail to conduct consultations, alleging that Indigenous peoples would not be affected, or engage in consultation processes that do not comply with internationally recognised requirements, by conducting informative meetings regarding projects when a decision was already adopted. In addition, even in situations where consent is a requirement, there is a resistance from States to comply with this. For instance, as mentioned in Chapter IV, and based on the idea that Indigenous peoples should be 'consulted as much as possible' but the ultimate decision must remain with governments, States have taken advantage of the exception established in Article 16 of the C169, which allows them to relocate Indigenous peoples without their consent following "appropriate procedures established by national law and regulations".[6] In addition, States have often adopted a 'less expansive' interpretation of UNDRIP which prioritises consultations instead of consent, an approach that is seemingly supported by the more recent regional jurisprudence by avoiding any discussion of FPIC, even in situations of non-negligible harm to their cultural and spiritual values.[7]

In this context, it is often the case that projects and developments taking place on Indigenous peoples' lands are implemented without States having full certainty about the potential effects on Indigenous traditional livelihoods (either due to a lack

[3] International Labour Office, "Partial revision of the Indigenous and Tribal Populations Convention 1957(No 107) Report VI (1)" 75th Session (1988), p 30.
[4] See for instance, S. Venne, "The New Language of Assimilation" in Without Prejudice Vol. II No 2(1989), pp 58-59. See also Chapter IV sections 6-3-6.3 and V section 2.2.3.
[5] M. Papillon and T. Rodon, "The Transformative Potential of Indigenous-Driven Approaches to Implementing Free, Prior and Informed Consent: Lessons from Two Canadian Cases", International journal on Minority and Group Rights 27 (2019), p 6. See also *supra* 4.
[6] Chapter IV section 6.3. See also A. Alva-Arevalo, "El derecho a la consulta previa de los pueblos indigenas en el Derecho Internacional" Cuadernos Deusto de Derechos Humanos Num 76, Universidad de Deusto, Bilbao (2014), p 72.
[7] Chapter V, sections 2.2.3.2; 3.1.2 and 3.2.1.

of knowledge or the existence of controversies) in particular those aspects of a cultural and spiritual nature. This could cause serious or even substantial harm to their way of life, as these aspects are difficult to identify, much less understand, without Indigenous peoples' full participation. For instance, the presence of foreigners can offend the spirits, affect their cosmovision or desecrate sacred places, affecting Indigenous peoples' cultural integrity and jeopardising their survival as peoples, as it involves more than physical aspects (like their right to life or personal integrity), but also their ability to maintain their special relationship with their lands and environment, as well as the protection of their distinct cultural identity, social structure, economic system, customs, beliefs and traditions.[8]

Considering the existence of these participatory power-imbalances, uncertainties and possible risks of serious/substantive harm to Indigenous peoples' traditional way of life, I analysed how the precautionary principle could strengthen the protection of their rights when States' actions may affect their lands and territories.

The precautionary principle was originally incorporated in international environmental law, to deal with the introduction of poorly understood technologies and chemicals and their possible effects and interactions on the environment. However, it has been implemented in other fields as well, such as trade, biodiversity, and human rights, including issues regarding Indigenous peoples, as illustrated by, for instance, the Akwe:Kon Voluntary Guidelines for cultural, social and environmental impact assessments.[9] In Chapter II, I mentioned that, in my view, the precautionary principle has achieved the status of 'general principle of international law', following the jurisprudence of the International Court of Justice and the argument that, due to its flexibility and the fact that the precautionary approach does

[8] Inter-American Court of Human Rights, "Case of the Saramaka people v. Suriname, Judgment of August 12, 2008 (Interpretation of the Judgment on Preliminary Objections, Merits, Reparations, and Costs)", paras. 29 and 37.

[9] Secretariat of the Convention on Biological Diversity, "Akwe: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessments regarding Developments proposed to take place on, or which are likely to impact on, Sacred Sites and on Lands and Waters Traditionally occupied or used by Indigenous and Local Communities" (CBD Guideline Series, 2004). See also M. Kamminga, "The Precautionary Approach in International Human Rights Law: How It can Benefit the Environment" in D. Freestone and E. Hey (eds), *The Precautionary Principle and International Law: The Challenge of Implementation* (Kluwer, 1996), p 185.

not require States to adopt specific actions (granting them discretion to adopt any effective and proportionate measure), there is no widespread and consistent practice to consider it as customary law.

This principle is triggered when there is a 'threat', of a 'serious/irreversible' nature, in a context of 'scientific uncertainty', with the idea that even if there is no clear cause-effect link established between a potential damage and its source, effective and proportionate action to avoid the materialization of this harm must be taken. This ensures that if mistakes are made, as often happens in situations of uncertainty, it is best to err on the side of caution. In this context, I mentioned that this principle has been influenced by a narrow notion of 'science', due to the historical context in which it was established, but inadequate to deal with risks and uncertainties that originate in human activities. For instance, extractive projects affect a multitude of complex relationships and human-environment dynamics, beyond the reach of the realms of conventional sciences like physics or biology; thus, a narrow approach that overlooks these aspects could result in ineffective precautionary action and serious or irreversible harm to both the environment and humans. This has been mentioned in the literature, with authors arguing in favour of expanding the notion of 'scientific uncertainty', by embracing other types of scientific knowledge that are able to address these dynamics, leading to effective precautionary measures.[10] Building upon this, I argued in Chapter II that, in situations where Indigenous peoples may be affected, it is necessary to integrate their traditional knowledge into this idea of 'scientific uncertainty'.

In this context, one important contribution of my research is related to the scientific nature of traditional knowledge. In effect, this is a system of knowledge, aimed to understand the universe and able to predict outcomes, that is tested and perfected through long periods of times by Indigenous peoples, in a systematic and rigorous fashion, through the incorporation of their practices and experiences. As such, it conforms to the general notion of science, i.e., "the intellectual and practical activity encompassing the systematic study of the structure and behaviour of the physical and natural world through observation and experiment",[11] having then a

[10] See Chapter II, section 3.2.
[11] Oxford Online Dictionary, 2019, www.en.oxforddictionaries.com/definition/science [accessed May 2019]

clear scientific nature, that I argued in Chapter III has been recognised in international law. In this character, traditional knowledge can be integrated into the notion of 'scientific uncertainty', constituting a scientific basis for the adoption of precautionary measures. This implies that the types of potential threats of non-negligible harm identified by relying on this knowledge are subject of precautionary treatment, expanding the precautionary principle. Following this, possible non-negligible effects on Indigenous peoples' livelihood (in particular cultural/spiritual aspects), originated from activities on their lands, fall under the scope of this principle, as there would be reasonable grounds for concern (provided by traditional knowledge) about potential 'threats' of a 'serious/irreversible' nature.

Another important contribution of my research, related to the above, is the acknowledgement of the role of traditional knowledge in the avoidance of potentially non-negligible harm to Indigenous peoples' way of life, as I detailed in Chapter III. In effect, this knowledge is developed by Indigenous peoples themselves, based on an integral understanding of their lands and the multiple relationships between its elements. It is also applied on their daily activities, underpinning their customs and practices, and combines spiritual, cultural, social and environmental aspects, even incorporating the existence of uncertainties as portrayed in their cosmologies. As such, it constitutes the best information available about Indigenous peoples' traditional livelihood, being able to fill information gaps, providing data about aspects not well-known outside the Indigenous community, such as traditional practices, or the location of sacred sites. Moreover, this knowledge can also determine the existence of uncertainties and possible risks, and how to address them. This is particularly important regarding cultural and spiritual aspects, which could be seriously affected by activities that, from an outsiders' perspective, may not seem materially significant but they are devastating at this cultural-spiritual level, such as the destruction of a single but sacred tree.

Embracing other types of knowledge in a precautionary context brings into focus the role of mechanisms for public participation necessary to incorporate them in decision-making,[12] which in the case of Indigenous peoples, refers to the duty to

[12] J. Peel, *Science and Risk Regulation in International Law* (CUP, 2010), p 336; L. Boisson de Chazournes, "New Technologies, the Precautionary Principle, and Public Participation" in T. Murphy (ed), *New Technologies and Human Rights* (OUP, 2009), p 179.

consult, which includes impact assessments. As such, they enable the incorporation of Indigenous peoples' traditional knowledge, concerns and interests in decision-making, including those regarding the anticipation of harm. Considering this, in my analysis I approached consultations/impact assessments from the perspective of their role in the avoidance of potentially non-negligible harm to Indigenous peoples' way of life (which is something that, to my knowledge, it has not been done before), instead of focusing on their participatory aspects, mentioned above,

In this context, as I mentioned in Chapter III, the Biodiversity regime provides a clear example where traditional knowledge is considered as a basis for the adoption of precautionary action, both in regard biodiversity conservation and the protection of Indigenous peoples' livelihood, being integrated into decision-making processes through environmental, cultural, social and cultural heritage impact assessments, as well as consultations. Moreover, a stronger safeguard, obtaining Indigenous peoples' consent, is established regarding possible effects on sacred sites, and lands and waters traditionally occupied and used by them, reflecting a precautionary logic of 'the higher the risk the greater the need for precaution'. This not only provides a strong degree of protection to their spiritual and cultural values, but also ensures that Indigenous interests and concerns are actually taken into account in the decision-making process.

However, and as I analysed in Chapter IV, this model is not replicated in the UN Treaty System. While traditional knowledge plays a role in the avoidance of future impacts, the Human Rights Committee has often relied on it to address 'direct' or 'imminent' threats of harm, disregarding concerns about potential effects that could not be "foreseen at present".[13] That being said, I also noted that, based on a 2009 decision, the Human Rights Committee may be open to consider potential threats of negative effects that are not imminent, by requiring conducting impact assessments, as well as obtaining Indigenous peoples' FPIC in the case of substantive harm to their rights. Yet, much remains to be clarified, as there are some inconsistencies in the practice of the monitoring bodies in regard to FPIC and anticipating harm, especially in the reporting procedure. These inconsistencies create

[13] Chapter IV section 3.3 a).

uncertainties about the standards applicable to the protection of Indigenous peoples' rights, undermining their effective protection.

The C169 for its part, analysed on the same chapter, seemed to follow a precautionary approach in regard to consultations and impact assessment in situation where Indigenous peoples' livelihood and lands could be affected (with the ILO monitoring bodies even sidestepping the qualification of 'whenever appropriate' in the case of impact studies),[14] recognising the importance of integrating Indigenous perspectives, concerns and knowledge in the decision-making process. However, I argued that it fails to continue with this approach when it comes to potential threats of substantive impacts; in effect, due to concerns about granting Indigenous peoples' a power similar to States, and based on a 'veto power' understanding of FPIC, C169 establishes a weak version of consent in the case of relocations, as noted above, and it is silent about cases of extractive activities on Indigenous peoples' lands which could affect their survival. Therefore, C169 does not establish effective safeguards against possible effects on Indigenous peoples' traditional way of life originated on the exploitation of their territories.

By contrast, from the analysis conducted in Chapter V, UNDRIP and the Inter-American and African systems seem to provide a better safeguard for Indigenous peoples' rights. UNDRIP for instance, follows a similar approach to consultations and traditional knowledge than C169, and despite not explicitly including them in its text, I argued that impact assessments are incorporated as 'appropriate measures' to mitigate adverse environmental, economic, social, cultural or spiritual impacts in the case of extractive activities (Article 32.3) and as an important part of 'informed consent', in a context that respect the precautionary principle.[15] Moreover, UNDRIP clearly recognises the duty to obtain consent in two instances of potentially devastating impacts on Indigenous peoples' way of life: relocations (without circumventing procedures) and the storage or disposal of hazardous materials on their lands. In addition, a majority of the doctrine considers that, when projects and developments could have major impacts on their lands and traditional livelihood, consent would also be required, based on an expansive

[14] Chapter IV, section 6.1.
[15] Chapter V, section 2.2.1.

interpretation of UNDRIP's purpose. That being said, a minority of mostly Indigenous authors argued that, by not fully recognising Indigenous peoples' right to self-determination, this Declaration perpetuates a colonial approach, which implies that final determinations about projects in their lands are left to States. As mentioned above, this approach seems to be supported by States' adopting a 'less expansive' view of FPIC. In this context, there is some uncertainty about the standard applicable in FPIC, but I consider that the majority argument aligns better with a precautionary approach.

The Inter-American system for its part provides a strong degree of protection to Indigenous peoples in situations of possible non-negligible harm from activities on their lands; in effect, it not only recognises States' duty to consult and conduct social and environmental impact assessments, but also (and aligned with the precautionary approach) it establishes the need to obtain Indigenous peoples' FPIC when there are 'large-scale developments or investment projects that would have a major impact on their territories, a notion that, as I noted in Chapter V, should be interpreted broadly. This standard is also applied by the African Commission on Human and Peoples' Rights, influenced by the work of the Inter-American Court; however, recent jurisprudence from both regional courts, where the issue of FPIC was not even discussed despite the existence of devastating harm on Indigenous peoples' territories and cultural/spiritual aspects, leaves some doubt about the application of this strong standard.

From this analysis, it is clear that there is no uniformity in international law about the protection of Indigenous peoples' rights from activities on their lands that could cause non-negligible harm to their traditional way of life. Considering these uncertainties and potential threats, I argued that it is necessary to rely on the precautionary principle. In this context, and constituting another important contribution of my research, I discussed in Chapter VI that consultations/impact assessments act as precautionary measures, which have several important consequences for the way in which States must act. In effect, as noted in Chapter VI, consultations and impact assessments are necessary to 'carefully assess potential impacts' on Indigenous peoples' traditional livelihood, and for them to understand 'possible risks' of an environmental, social, and cultural character, ensuring that they

are aware of such risks, in order to accept the possible impacts on their way of life. In addition, consultations and impact assessments play a vital role in the identification, anticipation and understanding of possible threats of a serious/irreversible nature to Indigenous peoples' traditional livelihood, as well as how to address them. It is also important to consider that States must conduct this duty to consult before the adoption of measures that 'may' affect Indigenous peoples, which occurs "when the interests or conditions (…) that are particular to them are implicated in the decision, even when the decision may have a broader impact",[16] i.e., when there is credible evidence, provided by Indigenous peoples themselves, that they could be affected by a certain measure. Putting this together, the conclusion is that consultations (and impact assessments) are triggered when there are reasonable grounds for concern that potentially non-negligible harm could affect Indigenous peoples' traditional way of life, acting as precautionary measures. This generates several important effects:

- first, when the precautionary principle is triggered, States have the duty to avoid the materialisation of non-negligible harm, putting other considerations on a secondary place. This means that questions about self-determination or control over natural resources, among others, cannot interfere with States' fulfilment of this precautionary duty in regard to Indigenous peoples' way of life.
- Second, while in strict sense States can adopt any precautionary measures, as long as they are proportionate and effective in avoiding the materialisation of non-negligible harm, it is important to recall that Indigenous peoples have a particular way of life, which is not able to be determined *in abstracto,* influenced by the relationship that they have with their lands and environment, and manifested in different ways across the world. This means that, as noted throughout this research, it is very difficult to identify possible threats of harm to their livelihood, in particular cultural and spiritual aspects, without relying on their traditional knowledge, the 'best information available' about their customs, traditions, values, ceremonies, and generally every aspect of their life. Thus, it is very unlikely that States can disregard Indigenous peoples' knowledge, concerns and interests in decision-making; doing so would risk the failure to comply with the precautionary principle, except perhaps in

[16] 2009 Report, para 43; V. Tauli-Corpuz, "Report of the Special Rapporteur on the rights of indigenous peoples", A/HRC/45/34, (18 June 2020), para. 57.

the case that States cancel or suspend the measure(s) that generated the potential threat before consultations.

- Third, and related to the above, when the potential risk is of a 'serious' nature, at the very least Indigenous peoples' knowledge and concerns must be accommodated into the decision-making process, by for instance modifying the project or development. Yet, if the possible threat is of a 'substantive' nature, following a logic of 'the higher the risk the greater the need for precaution', a stronger precautionary measure is required. From the analysis of international law instruments and bodies in previous chapters, FPIC is required when it comes to situations of projects or development plans that 'may have profound impacts' or 'potentially substantially affect Indigenous peoples in the exercise of any of their substantive rights in relation to the lands and resources within their territories', among others. Thus, it is clear that consent constitutes a heightened precautionary safeguard (i.e., the potential substantive harm would not occur if an agreement is not reached or FPIC is not obtained), which guarantee that their positions, views and concerns are actually taken into account in the decision-making process and that only the risks that they deem acceptable could occur, erring on the side of caution. Considering the particularities of Indigenous peoples' traditional way of life, this is applicable even if the possible impacts do not seem to be of a great magnitude in physical terms, but nevertheless could have devastating effects on their livelihood, as identified and assessed by Indigenous peoples (such as effects on sacred sites). This also provides a consistent standard, by which States must obtain Indigenous peoples' consent if the answer to the question 'is there credible evidence of potentially substantive effects on Indigenous peoples' way of life and/or environment?' is affirmative, moving away from issues like the meaning and interpretation of 'large-scale developments that would have a major impact', as mentioned in Chapter V, or self-determination and control over natural resources, as noted above.

- Finally, if Indigenous peoples consider that the course of action adopted by a State is not going to abate the potentially non-negligible harm, they can challenge this, needing only to comply with the precautionary standard of proof, i.e., a *prima facie* case that, based on the best information available, there are 'reasonable grounds for concern' that serious/irreversible harm may be caused to their traditional way of life

and/or environment. If this standard is met, then the State would have to prove that this potential impact will not occur, and if it can't, it would have to adopt (or correct) precautionary measures, aligning itself with Indigenous peoples' knowledge and concerns.

All this indicates that a wider precautionary principle, enriched by the use of traditional knowledge, is able to strengthen the protection of Indigenous peoples' rights when States' actions may have a negative impact on their lands and environment.

A possible avenue to continue doing research, based on this study, would be a comparative analysis of how traditional knowledge is integrated into decision-making processes from an Indigenous perspective. This would help to refine participatory mechanisms put in place by States, in order to properly assess threats to Indigenous values which are not always well-understood by non-indigenous peoples, like cultural or spiritual aspects, and generating better instances to respectfully integrate traditional knowledge in the consideration of potential threats of serious or irreversible harm. This would also help to clarify, at a local level, what could constitute 'substantive' harm, requiring their consent, establishing clear guidelines on how to proceed with projects and developments on their lands.

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